

# X-BRICK

DTS



USER'S MANUAL rel. 1.0 GB

CE

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**1- SYMBOLS**

Graphic symbols used on this manual:



**THIS SYMBOL INDICATES A HOT SURFACE**



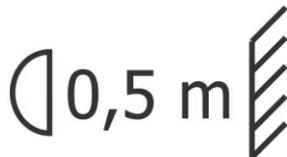
**THIS SYMBOL INDICATES ELECTRIC SHOCK RISK**



**THIS SYMBOL INDICATES GENERAL RISK**

$t_a$  40°C

**THIS SYMBOL INDICATES THE MAXIMUM OPERATING AMBIENT TEMPERATURE**



**THIS SYMBOL INDICATES THE MINIMUM DISTANCE FROM THE ILLUMINATED OBJECTS**



**THIS SYMBOL MEANS “DO NOT STARE AT THE OPERATING LIGHT SOURCE”**



Risk Group 2

**THIS SYMBOL INDICATES PHOTOBIOLOGICAL SAFETY**



**THIS SYMBOL INDICATES THE EUROPEAN COMMUNITY DIRECTIVE 2012/19/EC ON WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)**

## **2- GENERAL WARNING**

Read the instruction contained in this user manual carefully, as they give important information regarding safety during installation, use and maintenance.

The unit is not for household use and must be installed by a qualified electrician or experienced person.

Always disconnect the device from the mains before maintenance.

The device must always be equipped with an efficient ground connection.

## **3- GENERAL WARRANTY CONDITIONS**

The unit is guaranteed for 36 months from the date of purchase against manufacturing material defects.

The warranty covers defects in materials and workmanship. The warranty is not applicable where a defect is caused by misuse or unauthorised repair of the product.

**Any functional or/and physical modification of the product is not allowed.**

## **4- TECHNICAL FEATURES**

### **DTS product codes:**

03.LDB130S11FC X-BRICK FC Ultra-Narrow lenses Black finishing

### **Output**

32 OSTAR STAGE "N" Full Color (RGBW) LEDs

15.300 lumens output

LED lifespan: 50.000 hours (70% lumen output)

### **Optical group**

8° projection angle

Range of quick-mounting holographic filters included: 20° / 40° / 60°x10° (no mounting tools required)

Uniform projection on surfaces

### **Color generation**

16 million colors

Wide palette of pure uniform Whites with variable linear color temperature (2700K – 8000K)

16 gel filter emulations

### **Control**

Wireless DMX transmitter/receiver (built-in)

DMX 512 / RDM protocols

LCD display + 4 capacitive touch keys

Internal operating system updatable via DTS Dongle Firmware Uploader

9 DMX modes:

#### **DMX Full Operation modes**

- Chase (default)
- Extended
- Sectors RGBW X4
- Sectors RGBW Fine X4
- Sectors RGBW + Shut + Dim X4

### DMX Single Layer modes (compatibility with all BRICK models)

- Standard
- Global RGBW
- Global RGBW + Shut + Dim
- Global RGBW + Dim Fine

### **Power supply**

Built-in full-range PSU 100-240Vac 50-60 Hz

Power consumption: 650W

### **Connections**

PowerCON TRUE1 In/Out IP65 panel connectors with water-proof caps

XLR 5 pins In/Out IP65 panel connectors with water-proof caps

### **Internal safety devices**

Overvoltage and overtemperature circuits protection

### **Operating ambient temperature**

-20° / 40°

### **Physical**

IP65

IK protection degree: IK09

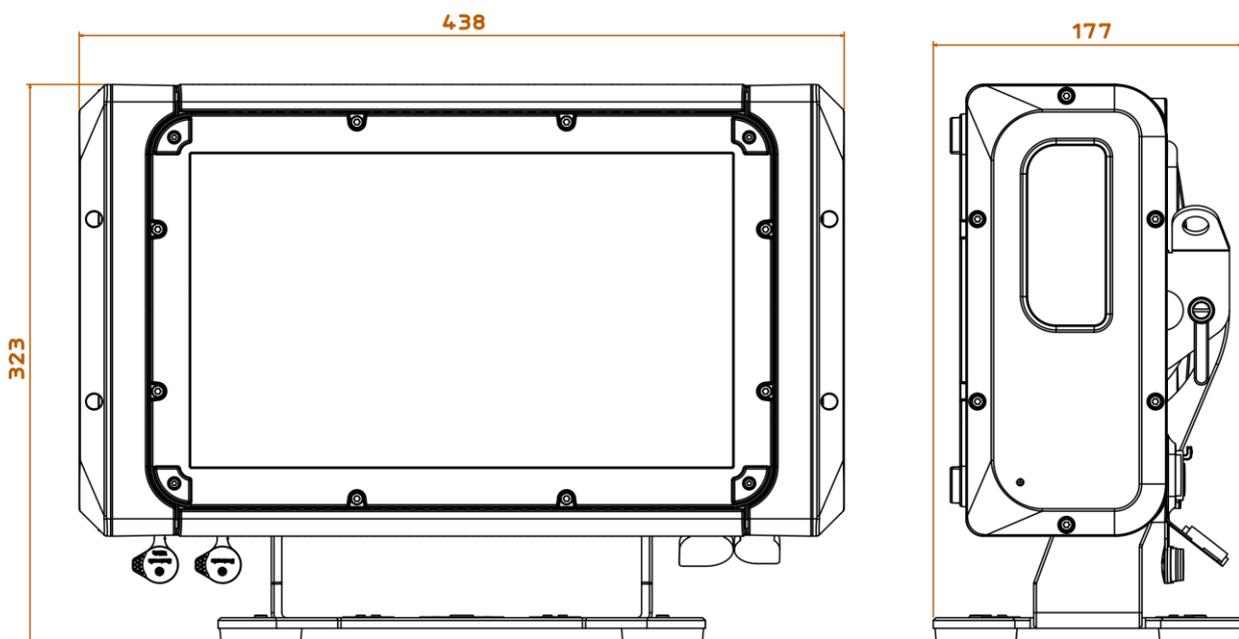
Weight: 14 Kg

Finishing: Black

### **Certifications**



### **DIMENSIONS**



## **5- ACCESSORIES**

### **As standard**

- 1 x Holographic filter 20° (code 0506A043.D18)
- 1 x Holographic filter 40° (code 0506A045.D18)
- 1 x Holographic filter 60°x10° (code 0506A092.D18)
- 1 x Cable with PowerCON TRUE1 female connector (code 02K0012267.0015)
- 1 x XLR 5-pole IP65 female cable connector (code 0508B177)
- 1 x XLR 5-pole IP65 male cable connector (code 0508B178)
- 1 x Display UV protection (code 03.LA.218)
- 1 x Omega bracket with "Fast Lock" (code 02K00467)
- 1 x User's Manual

### **Optional (on request)**

- Holographic filter 10° (code 0506A101.D18)
- Holographic filter 60° (code 0506A103.D18)
- Holographic filter 80° (code 0506A121.D18)
- Holographic filter 30x60° (code 0506A133.D18)
- Barndoor black finishing (code 03.LA.237.11)
- Visor black finishing (code 03.LA.236.11)
- Aliscaf clamp for tube diameter 50 mm (Max load 200 Kg) (code 0521A033)  
**(indicated for any kind of loads vertical / horizontal)**
- Professional Quick trigger clamp (Max load 100 Kg) (code 0521A037) **(not indicated for horizontal load)**
- "C" Clamp G60 (Max load 50 Kg) (code 0521A004) **(not indicated for horizontal load)**
- Safety cable 5 x 600 mm (Max load 60 Kg) (code 0521A038)
- DTS Dongle firmware uploader (code 03.LA.206)

## **6- IMPORTANT SAFETY INFORMATION**

### **6.1 Fire prevention:**

- Minimum distance from the closest illuminable surface: 0,5 m. 
- Replace any blown or damaged fuses only with those of identical value.  
Attention: the fuse replacement must be made by DTS personnel or experienced person.
- Connect the unit to mains power via a thermal magnetic circuit breaker.

### **6.2 Prevention of electric shock:**



- High voltage is present inside the unit. Unplug the unit prior to performing any function which involves touching the inside of the projector.
- The level of technology inherent in the X-BRICK requires the assistance of specialised personnel for all servicing.  
Please refer to an authorised DTS service centre.
- A good earth connection is essential for proper functioning of the unit.
- Never connect the unit without proper earth connection.
- The fixture should be located in places with a good air ventilation.

### **6.3 Safety:**



-Risk Group 2 product according to EN 62471.  Risk Group 2  
CAUTION. Do not look directly into the light output. May be harmful to the eyes and skin.

-Do not stare at the operating light source.



- The luminaire should be positioned so that prolonged staring into the luminaire at a distance of 25,94 m is not expected.
- The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.
- The unit is not for household use and must be installed by a qualified electrician or experienced person.
- The projector should always be installed with bolts, clamps and other tools that are capable of supporting the weight of the unit.
- Always use a second safety cable to sustain the weight of the unit in case of the failure of the main fixing point.
- The external surface of the unit, at various points, may exceed 60°C. Never handle the unit until at least 5 minutes have elapsed since the projector was turned off.
- Never install the fixture in an enclosed area lacking sufficient air flow.



The ambient temperature should not exceed 40°C.  $t_a$  40°C

### **6.4 Level of protection against the penetration of solid and liquid objects:**



- The projector is classified as an outdoor appliance and its protection level against the penetration of solid and liquid objects is IP65.  
Suitable for wet locations.

## **6.5 Waste Electrical and Electronic equipment (WEEE) directive:**



-The machine, accessories and packaging should be sorted for environmental-friendly Recycling.

For EC countries: according to the European Directive 2012/19/EC for Waste Electrical and Electronic Equipment and its implementation into national right, luminaires that are no longer usable must be collected separately and disposed of in an environmentally correct manner.

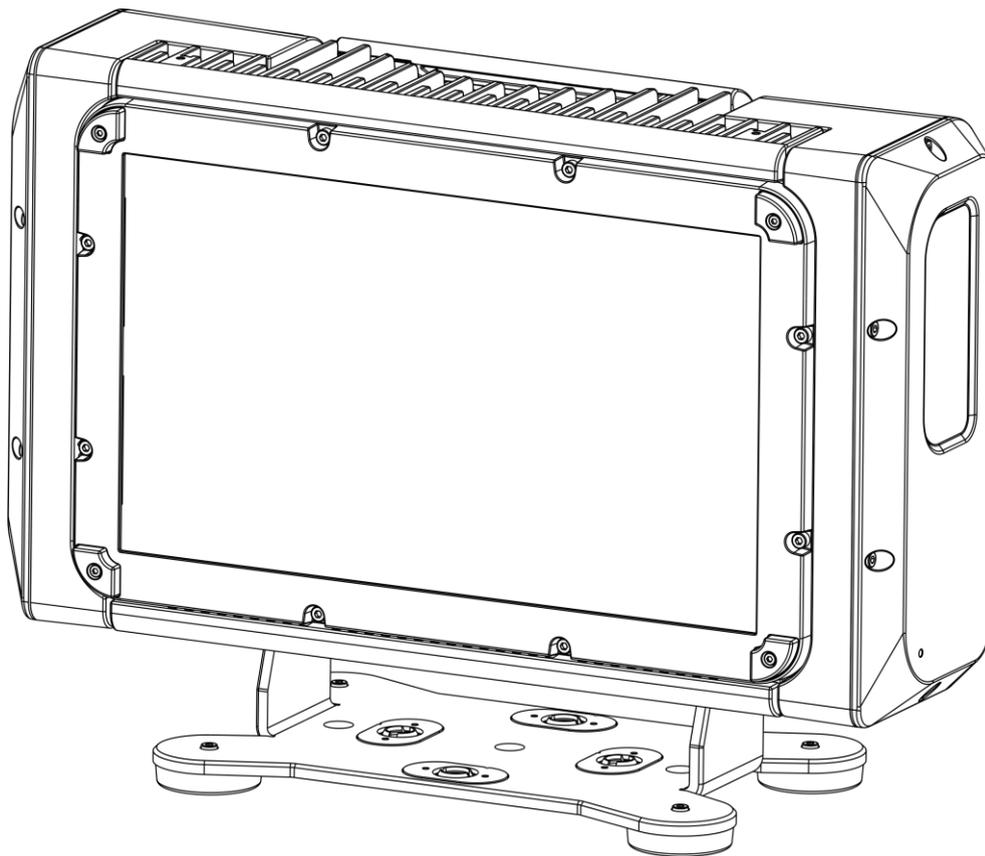
## **7- INSTALLATION**

The unit is suitable for wet locations.

### **7.1 Floor mounting installation**

BRICK may be either floor or ceiling mounted.

For floor mounting installation, X-BRICK is supplied with four rubber mounting feet on its bracket to be used as a self standing projector.



## **7.2 Ceiling mounting installation**

For ceiling mounting installation, it is recommended the use of appropriate clamps to fix the unit to the mounting surface.

An included Omega bracket with Fast Lock connections allows to hang X-BRICK by using fixing clamps for truss.

The supporting structure from which the unit is hung should be capable of bearing the weight of the unit, as should any clamps used to hung it.

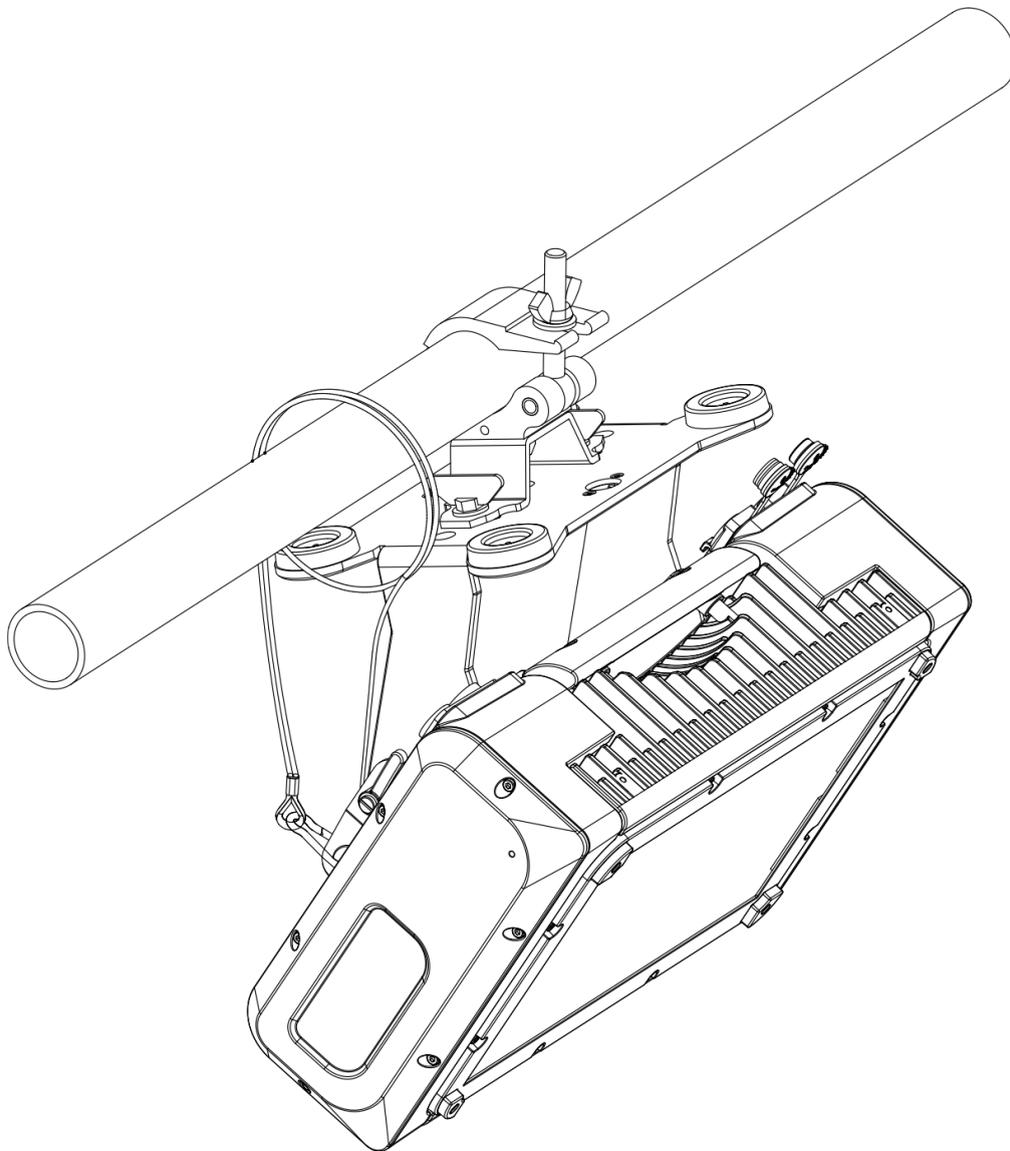
For outdoor application where X-BRICK needs to be installed vertically keep the unit display towards the floor.

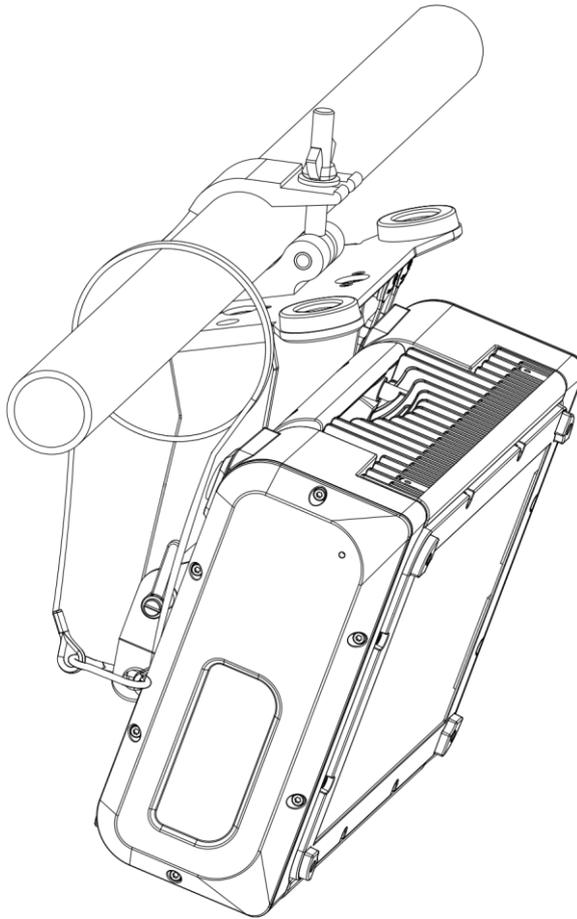
### **ATTENTION:**

A safety cable must be securely fixed to the unit's mounting bracket and to the support structure of the projector as shown in the picture.

A suitable safety cable (code 0521A038) is available on demand.

### **Installation with Omega bracket:**



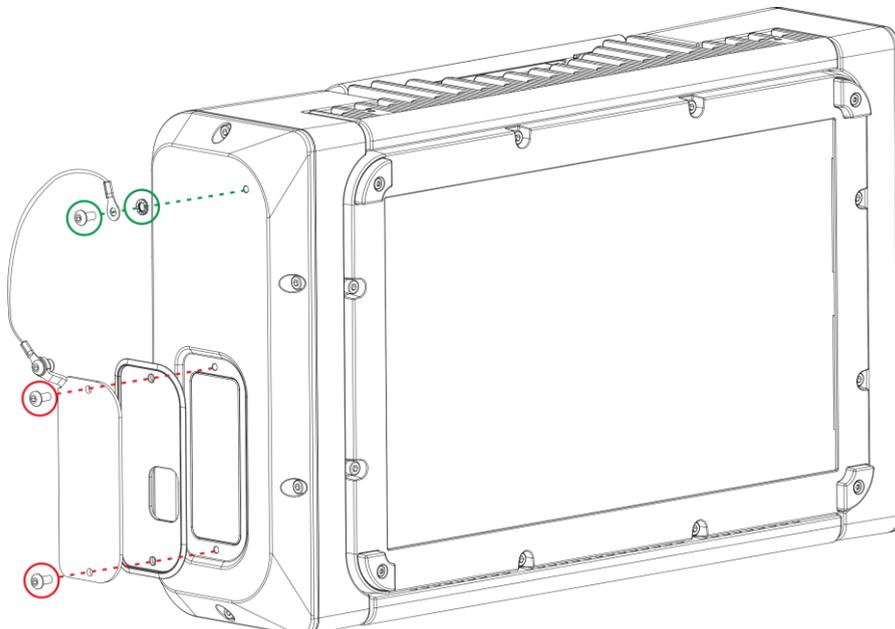
**Installation without Omega bracket:****7.3 Display UV Protection**

For outdoor installation, X-BRICK is provided with a Display UV protection (code 03.LA.218).

To install the Display UV protection:

Put in place the UV protection plate and the gasket on the display panel and fix both with the 2 marked screws provided in the kit.

Fix the safety cable on the side cap with the marked screw and the washer provided in the kit as shown in the picture.

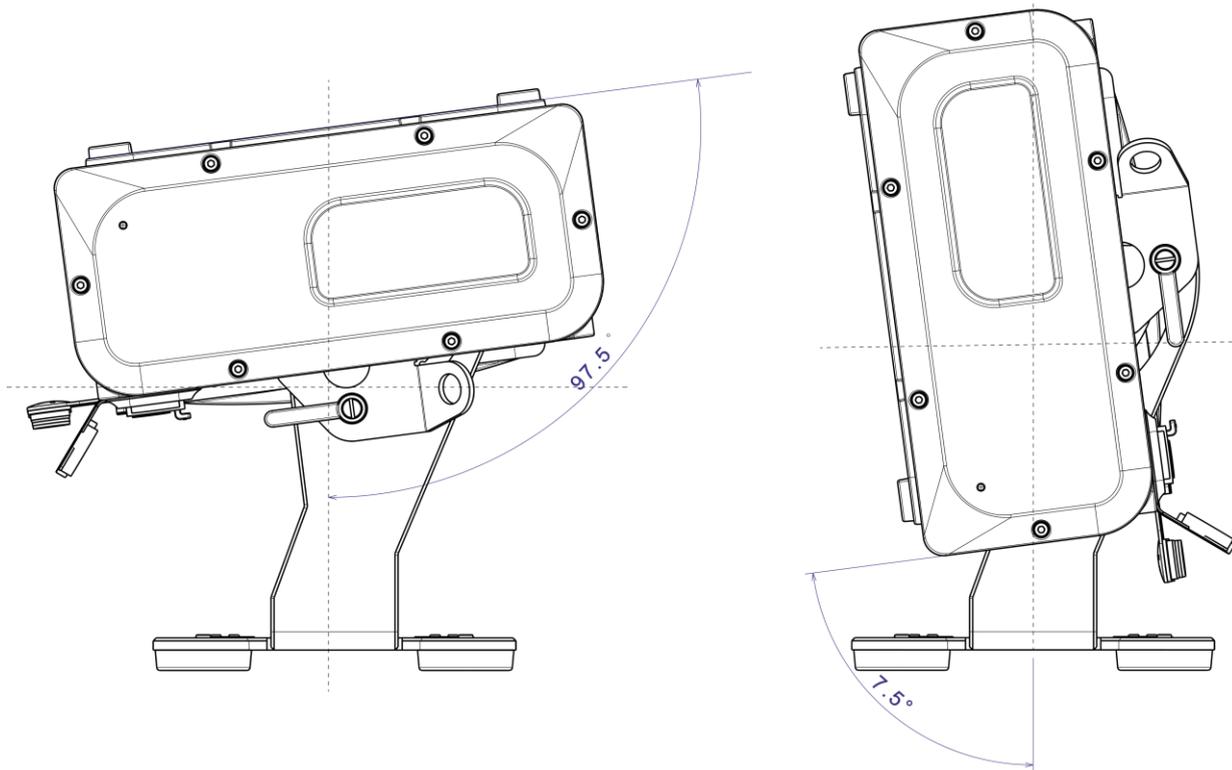


## **7.4 Protection against liquids**

If IP65 protection is impaired for any reason, do not expose this product to external atmospheric agents, because it could be damaged.

## **7.5 Movement**

The projector has a maximum movement of 105° for Tilt.



## **7.6- Risk of fire**

Each fixture produces heat and must be installed in a well-ventilated place.

Minimum distance from the object being illuminated is 0,5 m.  $\text{D} 0,5 \text{ m}$

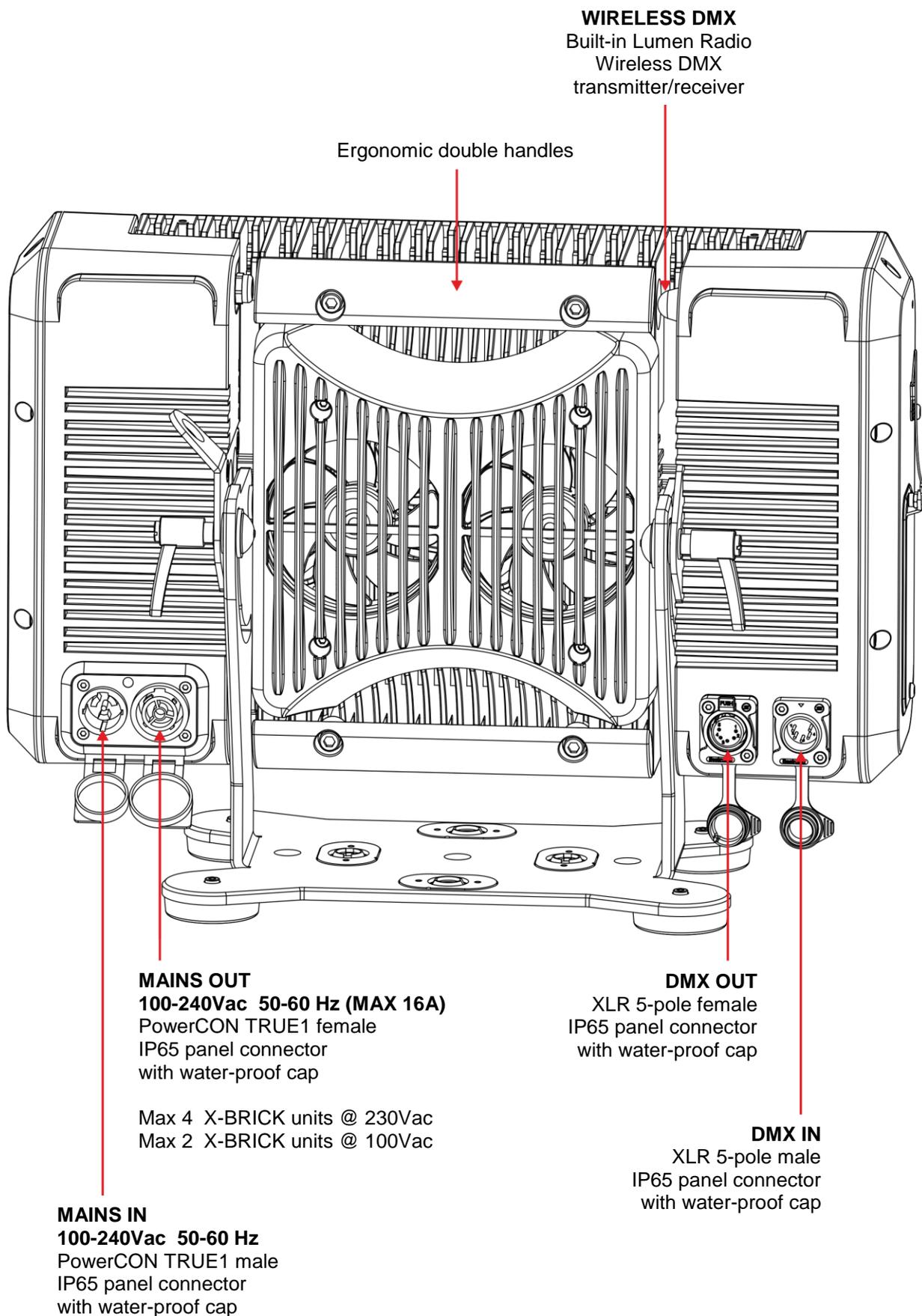
## **7.7- Forced ventilation**

You will note, on inspection, that the unit features various air inlets and cooling fans. These should, under no circumstances, be blocked or obstructed whilst the projector is in operation. Doing so could cause the fixture to seriously overheat thereby compromising its proper operation.

## **7.8- Ambient temperature**

The projector should never be installed in places that lack a constant air flow.

The ambient temperature should not exceed 40°C.  $t_a 40^\circ\text{C}$

**8- INPUT / OUTPUT CONNECTIONS**

## 9- DMX SIGNAL CONNECTION:

The unit operates using a digital DMX 512 signal.

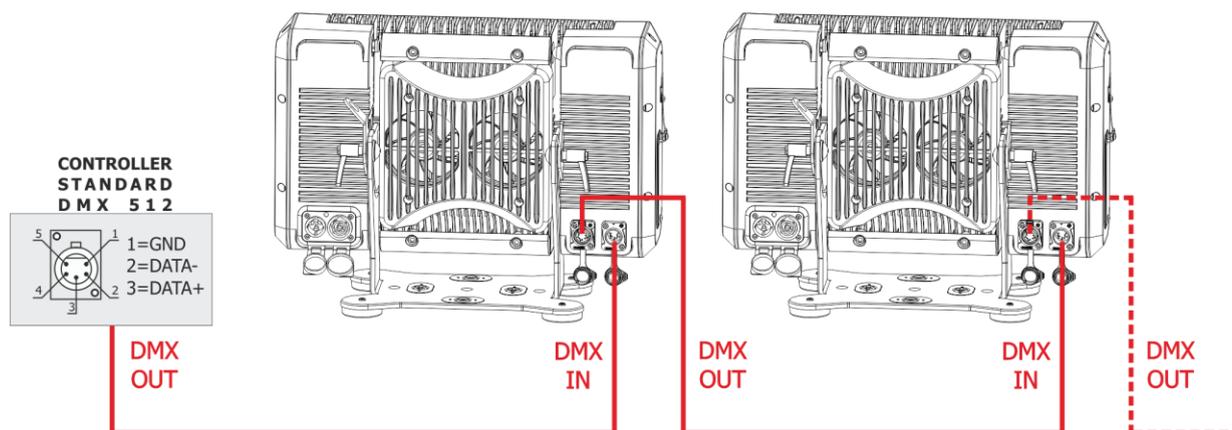
Connection between the controller and the unit or between units must be carried out using a two pair screened  $\varnothing$  0.5 mm.

Ensure that the conductors do not touch each other.

Do not connect the cable ground to the DMX connector chassis.

The plug housing must be isolated. Connect the mixer signal to the DMX IN projector plug and connect it to the next projector by connecting the DMX OUT plug on the first unit to the DMX IN plug of the second one.

In this way, all the projectors are cascade connected.



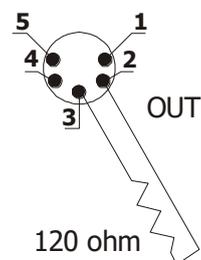
If the display showing the DMX address flashes, then one of the following errors has occurred:

- DMX signal not present
- DMX reception problem

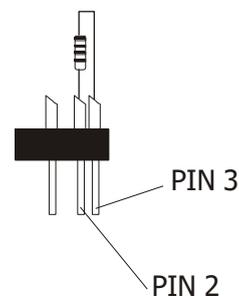
For Installations where long distance DMX cable connections are needed, we suggest to use a DMX terminator.

The DMX terminator is a male XLR 3-5 pins connector with a 120 ohm resistor Between pin 2 and 3.

The DMX terminator must be plugged into the last unit (DMX out panel connector) of the DMX line.



PLACE A 120 OHM RESISTOR BETWEEN PIN 2 AND 3 OF A MALE XLR CONNECTOR AND PLUG IT INTO THE DMX OUT PANEL CONNECTOR OF THE LAST UNIT CONNECTED TO THE DMX LINE



## **9.1 DMX addresses**

X-BRICK can be used in 9 DMX modes:

1. Standard (10 ch)
2. Chase (23 ch) (Default)
3. Extended (29 ch)
4. Global RGBW (4 ch)
5. Global RGBW + Shut + Dim (6 ch)
6. Global RGBW + Dim Fine (10 ch)
7. Sectors RGBW X4 (16 ch)
8. Sectors RGBW Fine X4 (32 ch)
9. Sectors RGBW + Shut + Dim X4 (24 ch)

### **DMX Full Operation modes**

- Chase (default)
- Extended
- Sectors RGBW X4
- Sectors RGBW Fine X4
- Sectors RGBW + Shut + Dim X4

### **DMX Single Layer modes (compatibility with all BRICK models)**

- Standard
- Global RGBW
- Global RGBW + Shut + Dim
- Global RGBW + Dim Fine

In order to use the unit in “Chase” mode (23 DMX channels) (Default), set the following addresses on the mixer:

Projector 1	A001	
Projector 2	A024	If you want to select the next projector, just add “23”
Projector 3	A047	
.....	A.....	
projector 6	A116	

## **9.2 Selecting the DMX address**

- 1) Press the UP-DOWN key until you reach the required DMX address. The numbers on the display will start to flash (but the new DMX address hasn't yet been set).
- 2) Press ENTER to confirm your selection. The numbers on the display will stop flashing and the projector is now controlled by the new DMX address.

TIPS: if you keep pushed the UP or DOWN keys, the channels are calculated more quickly and you get a faster selection.

## **10- RDM FUNCTIONS**

By using a RDM controller it is possible to set DMX address, DMX mode and other parameters. X-BRICK accepts the following RDM commands:

### **RDM Device Model ID: 0x0D65**

<b>RDM PID DESCRIPTION</b>	<b>RDM PID VALUE</b>	<b>GET</b>	<b>SET</b>
<b>Category – Network Management</b>			
DISC_UNIQUE_BRANCH	0x0001		
DISC_MUTE	0x0002		
DISC_UN_MUTE	0x0003		
<b>Category – Status Collection</b>			
STATUS_MESSAGES	0x0030	X	
STATUS_ID_DESCRIPTION	0x0031	X	
<b>Category - RDM Information</b>			
SUPPORTED_PARAMETERS	0x0050	X	
PARAMETERS_DESCRIPTION	0x0051	X	
<b>Category – Product Information</b>			
DEVICE_INFO	0x0060	X	
DEVICE_MODEL_DESCRIPTION	0x0080	X	
MANUFACTURER_LABEL	0x0081	X	
DEVICE_LABEL	0x0082	X	X
SOFTWARE_VERSION_LABEL	0x00C0	X	
<b>Category - DMX512 Setup</b>			
DMX_PERSONALITY	0x00E0	X	X
DMX_PERSONALITY_DESCRIPTION	0x00E1	X	
DMX_START_ADDRESS	0x00F0	X	X
<b>Category – Sensors</b>			
SENSOR_DEFINITION	0x0200	X	
SENSOR_VALUE	0x0201	X	X
<b>Category – Power/Lamp Settings</b>			
DEVICE_HOURS	0x0400	X	
LAMP_HOURS	0x0401	X	
<b>Category – Display Settings</b>			
DISPLAY_INVERT	0x0500	X	X
<b>Category – Control</b>			
IDENTIFY_DEVICE	0x1000	X	
<b>Category – Dimmer Settings (Additional Messages)</b>			
CURVE	0x0343	X	X
CURVE_DESCRIPTION	0x0344	X	
OUTPUT_RESPONSE_TIME	0x0345	X	X
OUTPUT_RESPONSE_TIME_DESCRIPTION	0x0346	X	
MODULATION_FREQUENCY	0x0347	X	X
MODULATION_FREQUENCY_DESCRIPTION	0x0348	X	

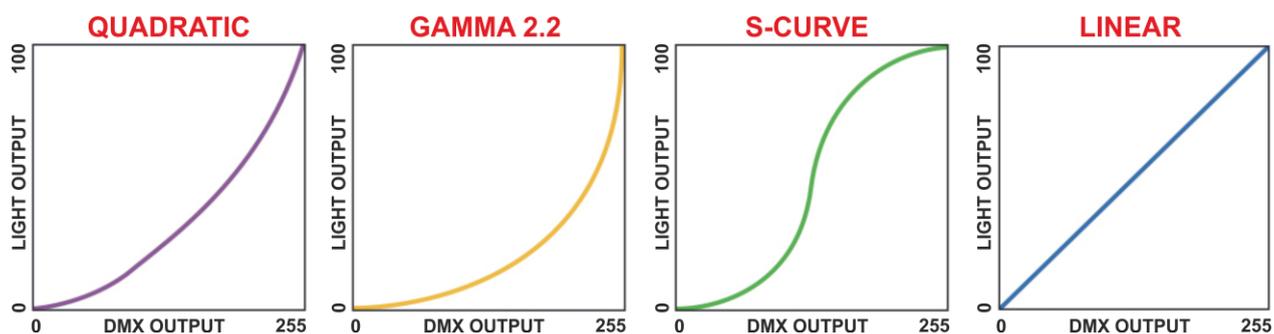
**10- RDM FUNCTIONS**

<b>RDM PID DESCRIPTION</b>	<b>RDM PID VALUE</b>	<b>GET</b>	<b>SET</b>
<b>Category – Manufacturer-Specific PIDs</b>			
LED PIXEL INVERT	0x9039	X	X
FANS SETTING	0x903A	X	X
DISPLAY STANDBY	0x903C	X	X
BKGND-CHS CROSSFADE	0x903D	X	X
NO DMX ACTION	0x9002	X	X
RED NO DMX	0x9003	X	X
GREEN NO DMX	0x9004	X	X
BLUE NO DMX	0x9005	X	X
WHITE NO DMX	0x9006	X	X
INT NO DMX	0x900A	X	X
RED FINE NO DMX	0x9014	X	X
GREEN FINE NO DMX	0x9015	X	X
BLUE FINE NO DMX	0x9016	X	X
WHITE FINE NO DMX	0x9017	X	X
INT FINE NO DMX	0x9018	X	X
RED2 NO DMX	0x9019	X	X
GREEN2 NO DMX	0x901A	X	X
BLUE2 NO DMX	0x901B	X	X
WHITE2 NO DMX	0x901C	X	X
INT2 NO DMX	0x901D	X	X
RED2 FINE NO DMX	0x901E	X	X
GREEN2 FINE NO DMX	0x901F	X	X
BLUE2 FINE NO DMX	0x9020	X	X
WHITE2 FINE NO DMX	0x9021	X	X
INT2 FINE NO DMX	0x9022	X	X
RED3 NO DMX	0x9023	X	X
GREEN3 NO DMX	0x9024	X	X
BLUE3 NO DMX	0x9025	X	X
WHITE3 NO DMX	0x9026	X	X
INT3 NO DMX	0x9027	X	X
RED3 FINE NO DMX	0x9028	X	X
GREEN3 FINE NO DMX	0x9029	X	X
BLUE3 FINE NO DMX	0x902A	X	X
WHITE3 FINE NO DMX	0x902B	X	X
INT3 FINE NO DMX	0x902C	X	X
RED4 NO DMX	0x902D	X	X
GREEN4 NO DMX	0x902E	X	X
BLUE4 NO DMX	0x902F	X	X
WHITE4 NO DMX	0x9030	X	X
INT4 NO DMX	0x9031	X	X
RED4 FINE NO DMX	0x9032	X	X
GREEN4 FINE NO DMX	0x9033	X	X
BLUE4 FINE NO DMX	0x9034	X	X
WHITE4 FINE NO DMX	0x9035	X	X
INT4 FINE NO DMX	0x9036	X	X

## 10- RDM FUNCTIONS

### RDM ADDITIONAL MESSAGEs:

CURVE	CURVE DESCRIPTION
1	1: LINEAR
2	2: QUADRATIC (default)
3	3: S-CURVE
4	4: GAMMA 2.2



OUTPUT RESPONSE TIME	OUTPUT_RESPONSE_TIME_DESCRIPTION
0	0: SMOOTH OFF
1	1: SMOOTH 1 ( 25 ms)
2	2: SMOOTH 2 ( 50 ms)
3	3: SMOOTH 3 ( 75 ms)
4	4: SMOOTH 4 (100 ms) (default)
5	5: SMOOTH 5 (125 ms)
6	6: SMOOTH 6 (150 ms)
7	7: SMOOTH 7 (175 ms)
8	8: SMOOTH 8 (200 ms)
9	9: SMOOTH 9 (225 ms)
10	10: SMOOTH 10 (250 ms)
11	11: SMOOTH 11 (275 ms)
12	12: SMOOTH 12 (300 ms)
13	13: SMOOTH 13 (325 ms)
14	14: SMOOTH 14 (350 ms)
15	15: SMOOTH 15 (375 ms)
16	16: SMOOTH 16 (400 ms)
17	17: SMOOTH 17 (425 ms)
18	18: SMOOTH 18 (450 ms)
19	19: SMOOTH 19 (475 ms)
20	20: SMOOTH 20 (500 ms)

**10- RDM FUNCTIONS****RDM ADDITIONAL MESSAGEs:**

<b>MODULATION FREQUENCY</b>	<b>MODULATION FREQUENCY DESCRIPTION</b>
1	1: 610 Hz
2	2: 800 Hz
3	3: 1000 Hz (default)
4	4: 1500 Hz
5	5: 2000 Hz
6	6: 2500 Hz
7	7: 3000 Hz
8	8: 3500 Hz
9	9: 4000 Hz
10	10: 4500 Hz
11	11: 5000 Hz

**RDM MANUFACTURER-SPECIFIC PIDs:**

<b>MANUFACTURER-SPECIFIC PID</b>	<b>DESCRIPTION</b>
LED PIXEL INVERT	0 = Disabled (default) 1 = Enabled
FANS SETTING	0 = Fan mode Standard (default) 1 = Fan mode Silent 2 = Fan mode Ultra-Silent 3 = Fan mode Auto
DISPLAY STANDBY	0 = DISABLED (Default) 1 = ENABLED 2 = FORCED ENABLED
NO DMX ACTION	1 = BLACKOUT 2 = PROGRAM 1-16 3 = RGB 100% 4 = RGB 60% 5 = CUSTOM 6 = CUSTOM2 7 = CUSTOM3 8 = CUSTOM4 9 = KEEP LAST (default)

**RDM MANUFACTURER-SPECIFIC PIDs:**

<b>MANUFACTURER-SPECIFIC PID</b>	<b>DESCRIPTION</b>
RED NO DMX	Range 0-255 (Default = 128)
GREEN NO DMX	Range 0-255 (Default = 128)
BLUE NO DMX	Range 0-255 (Default = 128)
WHITE NO DMX	Range 0-255 (Default = 128)
INT NO DMX	Range 0-255 (Default = 128)
RED FINE NO DMX	Range 0-255 (Default = 128)
GREEN FINE NO DMX	Range 0-255 (Default = 128)
BLUE FINE NO DMX	Range 0-255 (Default = 128)
WHITE FINE NO DMX	Range 0-255 (Default = 128)
INT FINE NO DMX	Range 0-255 (Default = 128)
RED2 NO DMX	Range 0-255 (Default = 128)
GREEN2 NO DMX	Range 0-255 (Default = 128)
BLUE2 NO DMX	Range 0-255 (Default = 128)
WHITE2 NO DMX	Range 0-255 (Default = 128)
INT2 NO DMX	Range 0-255 (Default = 128)
RED2 FINE NO DMX	Range 0-255 (Default = 128)
GREEN2 FINE NO DMX	Range 0-255 (Default = 128)
BLUE2 FINE NO DMX	Range 0-255 (Default = 128)
WHITE2 FINE NO DMX	Range 0-255 (Default = 128)
INT2 FINE NO DMX	Range 0-255 (Default = 128)
RED3 NO DMX	Range 0-255 (Default = 128)
GREEN3 NO DMX	Range 0-255 (Default = 128)
BLUE3 NO DMX	Range 0-255 (Default = 128)
WHITE3 NO DMX	Range 0-255 (Default = 128)
INT3 NO DMX	Range 0-255 (Default = 128)
RED3 FINE NO DMX	Range 0-255 (Default = 128)
GREEN3 FINE NO DMX	Range 0-255 (Default = 128)
BLUE3 FINE NO DMX	Range 0-255 (Default = 128)
WHITE3 FINE NO DMX	Range 0-255 (Default = 128)
INT3 FINE NO DMX	Range 0-255 (Default = 128)
RED4 NO DMX	Range 0-255 (Default = 128)
GREEN4 NO DMX	Range 0-255 (Default = 128)
BLUE4 NO DMX	Range 0-255 (Default = 128)
WHITE4 NO DMX	Range 0-255 (Default = 128)
INT4 NO DMX	Range 0-255 (Default = 128)
RED4 FINE NO DMX	Range 0-255 (Default = 128)
GREEN4 FINE NO DMX	Range 0-255 (Default = 128)
BLUE4 FINE NO DMX	Range 0-255 (Default = 128)
WHITE4 FINE NO DMX	Range 0-255 (Default = 128)
INT4 FINE NO DMX	Range 0-255 (Default = 128)

## **10- RDM FUNCTIONS**

### **RDM STATUS MESSAGE IDs:**

<b>Status Message ID</b>	<b>Data Value 1</b>	<b>Data Value 2</b>	<b>Status ID Description</b>
0x8008			ERROR SUPPLY VOLTAGE TOO LOW
0x8009			ERROR SUPPLY VOLTAGE TOO HIGH
0x800B			ERROR BUS LED DRIVER
0x801F			ERROR TEMPERATURE LED MODULE
0x8020	1: DRV1 2: DRV2 12: DRV1&DRV2		ERROR TEMPERATURE LED DRIVER %d
0x8021			ERROR TEMPERATURE MICRO
0x9000	1: RED 2: GREEN 3: BLUE 4: WHITE	1: SECTOR 1 2: SECTOR 2 3: SECTOR 3 4: SECTOR 4	ERROR LED %%d SECT %%d OPEN
0x9001	1: RED 2: GREEN 3: BLUE 4: WHITE	1: SECTOR 1 2: SECTOR 2 3: SECTOR 3 4: SECTOR 4	ERROR LED %%d SECT %%d SHORT
0x9010			ERROR TEMPERATURE PSU

## **11- FIRMWARE UPDATING**

To update the firmware release of the X-BRICK you need:

- DTS Dongle Firmware Uploader (code 03.LA.206).
- “DTS Firmware Upgrade Utility v.2.02” program installed on PC.
- Latest firmware release available for X-BRICK unit.

### **Updating the firmware release.**

Please follow the procedure below to perform the update:

1. Connect the DTS Dongle Firmware Uploader to a spare USB port on the PC.
2. Connect the unit DMX input to the DTS Dongle Firmware Uploader DMX output with a standard DMX cable and turn ON the unit.
3. Send the new firmware release into the unit by using “DTS Firmware Upgrade Utility v.2.02” program. At the end of the procedure, the unit will reset.

For more information please refer to an authorised DTS service centre.

## 12- DISPLAY FUNCTIONS

The X-BRICK display panel shows all the available control menus. Using these options, it is possible to change the fixture's setting. Changing the DTS settings can vary the functions of the unit so that it does not respond to the DMX 512 used to control it. Carefully follow the instructions below before carrying out any variations or selections.



<b>MENU</b>	<ul style="list-style-type: none"> <li>• To access the control menus in the display panel.</li> <li>• To return to the previous level in the menu structure without making a change.</li> <li>• To exit the menus.</li> </ul>
<b>ENTER</b>	<ul style="list-style-type: none"> <li>• To select any required menu.</li> <li>• To confirm any changes.</li> </ul>
<b>UP / DOWN</b>	<ul style="list-style-type: none"> <li>• To navigate the menus structure.</li> <li>• To change any value.</li> </ul>

<b>MASTER FIRMWARE RELEASE</b>	<b>1.00</b>
<b>SLAVE FIRMWARE RELEASE</b>	<b>1.00</b>
<b>RDM Device Model ID</b>	<b>0x0D65</b>
<b>DMX Personality IDs</b>	0x01 "STANDARD (10CH)" 0x02 "CHASE (23CH)" 0x03 "EXTENDED (29CH)" 0x04 "GLOBAL RGBW (4CH)" 0x05 "GLOBAL RGBW+SHUT+DIM (6CH)" 0x06 "GLOBAL RGBW+DIM FINE (10CH)" 0x07 "SECTORS RGBW X4 (16CH)" 0x08 "SECTORS RGBW FINE X4 (32CH)" 0x09 "SECTORS RGBW+SHUT+DIM X4 (24CH)"

### DISPLAY KEY-LOCK FUNCTION

Display key-lock function can be enabled/disabled by pressing ENTER + DOWN keys at the same time for 3 seconds.

MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION
DISPLAY	FLIP	SUSPENDED		Reverses display's reading depending on the mounting position. On the ground or suspended. <b>Suspended (Default).</b>
		ON THE GROUND		
	STANDBY	DISABLED		<b>Display stand-by disabled (Default).</b>
		ENABLED		Display goes OFF after 10 seconds.
		FORCED EN.		Display forced OFF even if control signal is missing or error messages are shown.
MODE	1 – 10CH STANDARD			Allows to select STANDARD mode (10 DMX channels). Single layer operation for compatibility with all BRICK models.
	2 – 23CH CHASE			<b>Allows to select CHASE mode (23 DMX channels). Default</b>
	3 – 29CH EXTENDED			Allows to select EXTENDED mode (29 DMX channels).
	4 – 4CH GLOBAL RGBW			Allows to select GLOBAL RGBW mode (4 DMX channels). Single layer operation for compatibility with all BRICK models.
	5 – 6CH GLOBAL RGBW+SHUT+DIM			Allows to select GLOBAL RGBW+SHUT+DIM mode (6 DMX channels). Single layer operation for compatibility with all BRICK models.
	6 – 10CH GLOBAL RGBW+DIM FINE			Allows to select GLOBAL RGBW+DIM FINE mode (10 DMX channels). Single layer operation for compatibility with all BRICK models.
	7 – 16CH SECTORS RGBW X4			Allows to select SECTORS RGBW mode (16 DMX channels).
	8 – 32CH SECTORS RGBW FINE X4			Allows to select SECTORS RGBW FINE X4 mode (32 DMX channels).
	9 – 24CH SECTORS RGBW +SHUT+DIM X4			Allows to select SECTORS RGBW+SHUT+DIM X4 mode (24 DMX channels).

MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION	
NO DMX ACTION	KEEP LAST DMX			Allows to set the desired unit's behavior in case DMX signal is missing or not available. <b>Keep last valid DMX signal (Default).</b>	
	BLACKOUT			Black-out.	
	PROGRAM 1-16	1 - 16			Chase with 16 steps previously created in REC mode. Speed time and wait time values (in seconds) selectable by user. <b>Default = 10.</b>
		SPEED		1 - 3600	
		WAIT		1 - 3600	
	RGB 100			RGB channels @ 100%.	
	RGB 60			RGB channels @ 60%.	
	CUSTOM	RED		0 - 255	Custom. RGBW, RGBW Fine and Dimmer values selectable by user. <b>Default = 128.</b>
		RED FINE		0 - 255	<b>Default = 128.</b>
		GREEN		0 - 255	<b>Default = 128.</b>
		GREEN FINE		0 - 255	<b>Default = 128.</b>
		BLUE		0 - 255	<b>Default = 128.</b>
		BLUE FINE		0 - 255	<b>Default = 128.</b>
		WHITE		0 - 255	<b>Default = 128.</b>
		WHITE FINE		0 - 255	<b>Default = 128.</b>
		DIMMER		0 - 255	<b>Default = 128.</b>
	DIMMER FINE		0 - 255	<b>Default = 128.</b>	
CUSTOM2			Custom2. RGBW, RGBW Fine and Dimmer values selectable by user only via RDM.		
CUSTOM3			Custom3. RGBW, RGBW Fine and Dimmer values selectable by user only via RDM.		
CUSTOM4			Custom4. RGBW, RGBW Fine and Dimmer values selectable by user only via RDM.		

MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION
MODE AUTO	PROGRAM 1-16	1 - 16		Automatic mode without DMX controller. Chase with 16 steps previously created in REC mode. Speed time and wait time values (in seconds) selectable by user ( <b>Default = 10</b> ). In Auto mode the unit do generate DMX for slave units.
		SPEED	1 - 3600	
		WAIT	1 - 3600	
	PERS. COLOUR	1 - 16		16 customizable Colour Macros. RGBW values selectable by user ( <b>Default = 255</b> ).
	RAINBOW	SPEED		Rainbow colours effect. Speed time value (in seconds) selectable by user ( <b>Default = 10</b> ).
	FIXED COLOUR	1 - 28		28 Colour Macros as on DMX channel "MACRO COLOR". <b>Default = 1.</b>
	CCT	2700 - 8000		12 White color temperature from 2700K to 8000K as on DMX channel "CCT". <b>Default = 2700K.</b>
	DIMMER	0 - 255		Dimmer level selectable by user as on DMX channel "DIMMER" <b>Default = 255.</b>
SHUTTER	0 - 255		Shutter level selectable by user as on DMX channel "SHUTTER" <b>Default = 15.</b>	
ESC			Esc from automatic mode.	
REC	10 CH	R001		In DMX Recorder mode it is possible to create and store the scenes of the PROGRAM 1-16 menu by using an external DMX controller. The unit must be set to 10 DMX channels mode. Refer to "REC MODE" for details.
		M001 – M016		
SLAVE	SURE	SLAVE		Slave mode. The unit is forced to DMX address 1 and 10 DMX channels mode receiving signal from the unit set in Auto mode.
		ESC		Esc from slave mode

MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION
WIRELESS	STATUS	DISABLED		Allows to control the unit via Wireless DMX. <b>Default = Disabled.</b>
		ENABLED		
	DIRECTION	RECEIVER		<b>The unit receives signal via Wireless DMX and transmit the signal to the DMX Output connector (Default).</b>
		TRANSMITTER		The unit works as Wireless DMX Transmitter. The unit receives signal from DMX Input connector and transmit the signal via Wireless.
	UNLINK			<u>Operation as Receiver:</u> To log off the unit from paired wireless transmitter device. <u>Operation as Transmitter:</u> To log off all the paired wireless receiver devices.
	ONLY FOR TRANSMITTER LINK			To log on all the free wireless receiver devices.

## WIRELESS

X-BRICK features a built-in Lumen Radio Wireless DMX transmitter/receiver.

### **Operation as Receiver (default)**

Enable Wireless DMX control under WIRELESS -> STATUS menu.

On the main display will appear "WIRELESS RX" (Default) above the DMX address.



To log on the unit to Lumen Radio or Wireless Solution compatible transmitter devices, press the connect button on the wireless transmitter device.

To optimize the wireless communication maintain TX to RX line of sight.

The maximum distance should not exceed 100 meters.

Select UNLINK menu to log off the unit from paired wireless transmitter device.

### **Operation as Transmitter**

Enable Wireless DMX control under WIRELESS -> STATUS menu.

Set the unit as Transmitter under DIRECTION -> TRANSMITTER menu.

On the main display will appear "WIRELESS TX" above the DMX address.



Connect the unit via DMX Input connector and pair the free wireless receiver devices by selecting LINK menu.

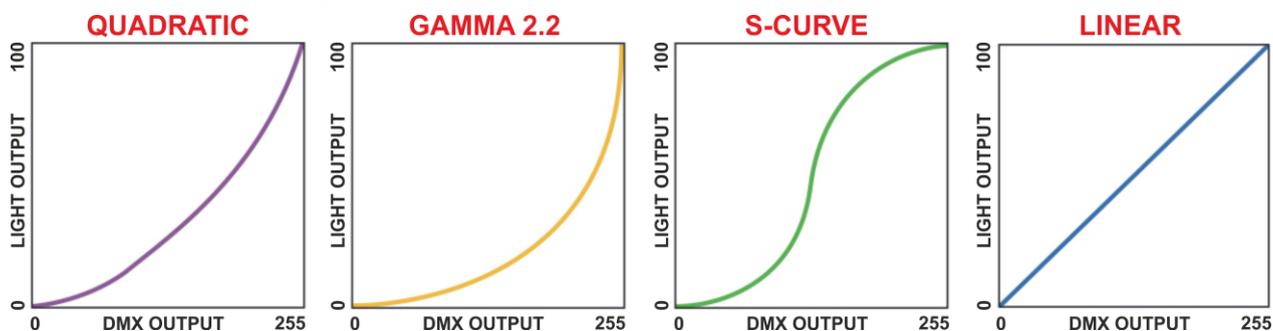
To optimize the wireless communication maintain TX to RX line of sight.

The maximum distance should not exceed 100 meters.

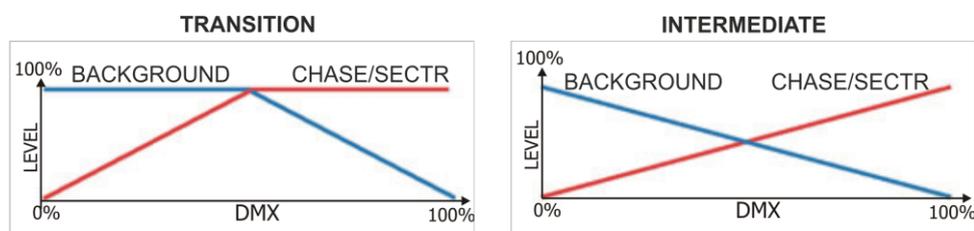
Select UNLINK menu to log off all the paired wireless receiver devices.

MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION	
LED	SMOOTH	OFF - 20		Allows to select the value of delay (in ms) for DIMMER channel reaction to DMX dimming command. OFF = Instant response. <b>4 = 100 ms smooth response (Default).</b> 20 = 500 ms smooth response.	
		COMP	QUADRATIC		<b>Allows to set quadratic current output for LED (Default).</b>
			GAMMA 2.2		Allows to set gamma curve 2.2 .
			S-CURVE		Allows to set S-curve to emulates light intensity characteristics of the tungsten halogen lamps.
	LINEAR		Allows to set linear light output.		
	SYNC	610 - 5000 HZ		Allows to adjust the PWM frequency value (Hz) in order to reduce flickering in the process of your camera recordings. Range = 610 Hz – 5000 Hz <b>Default = 1000 Hz</b>	
	BKG-CHS CROSSFADE	TRANSITION		<b>Allows to set Crossfade Transition from background to chase/sector of DMX modes 2 and 3. (Default).</b>	
		INTERMEDIATE		Allows to set Crossfade Intermediate from background to chase/sector of DMX modes 2 and 3.	
	LED PIXEL INVERT	NORMAL		Standard pixel/sectors sequence. <b>Normal = Default.</b>	
		REVERSE		To invert pixel/sectors sequence. Refer to page 35 for details.	

### “COMP” GRAPHICS:



### “CROSSFADE” GRAPHICS:



MAIN MENU	LEVEL 1	LEVEL 2	LEVEL 3	FUNCTION
FAN	STANDARD			<b>Fans standard speed (Default).</b> If temperature <15°C: fans OFF. If temperature >15°C: fans speed is increased within the factory values range.
	SILENT			Reduced fans speed for a low noise operation. If temperature <15°C: fans OFF. If temperature >15°C: fans speed is increased within the factory values range.
	ULTRA SILENT			Low fans speed for a very low noise operation. If temperature <15°C: fans OFF. If temperature >15°C: fans speed is increased within the factory values range.
	AUTO			Automatic fans speed. If temperature <40°C: fans OFF. If temperature >40°C: fans speed is increased related to system working conditions.
DEFAULT SET	SURE			To restore factory settings.
SYSTEM INFO	TEMPERATURE	DRV1 41.4 40.8 DRV2 40.5 41.0 LED 48.2 PSU 43.4 MICRO 1 46.6 MICRO 2 45.5		DRV-1: LED Driver Master board temperature monitoring. DRV-2: LED Driver Slave board temperature monitoring. LED: LED temperature monitoring. PSU: Power supply temperature monitoring. MICRO 1: Micro controller of LED Driver Master board temperature monitoring. MICRO 2: Micro controller of LED Driver Slave board temperature monitoring.
	SOFTWARE	MASTER DRV1 V.1.00 SLAVE DRV2 V.1.00		LED Driver Master and Slave board firmware release.
	TIME COUNTERS	S1 (R G B W) S2 (R G B W) S3 (R G B W) S4 (R G B W) UNIT LIFE		RGBW LEDs life time for each sector and unit life time.
	LEDS STATUS	S1 (R G B W) S2 (R G B W) S3 (R G B W) S4 (R G B W)		RGBW LEDs status monitoring for each sector: NA = Not available. OK = LEDs properly working. SH = LEDs in short circuit. OP = LEDs in open circuit.

## **13- REC MODE**

### **DMX Recorder mode**

For the programming of ChPr by using a DMX controller, besides the 10 channels necessary to control the unit a further 3 DMX channels are needed.

So that in RECORDER mode (via DMX) the unit will need 13 channels to be correctly programmed.

The three new DMX channels are:

DMX channel 11 = SCENES channel

From 0-10 = no function (r001)

From 11-255 are displayed the programmable scenes (max 16 scenes from M001 to M0016)

DMX channel 12 = EDIT channel:

-From 0-19 = no function

-From 20-234 the unit runs the configuration given by the received input DMX values.

With the channel SCENES it is possible to pass from one step to the next while with REC it is possible to record the selected scene.

-From 235-255 the unit runs the configuration given by the received input DMX values closing the sequence as last scene.

With the channel REC it is possible to record the selected scene as last scene.

DMX channel 13 = RECORDING channel

Records the set scene with a variation between 0 to 255 (the display flashes indicating that the scene has been recorded). It is advised that you keep the REC channel set to 0 and to run through the 255 only once you have decided to save the scene. If ChPr is not closed, by indicating the last scene (Edit channel between 235-255), in playback mode all 16 scenes will be played through even if not programmed.

**14- ERROR MESSAGES**

<b>ERROR SHOWED ON DISPLAY</b>	<b>APPEARS WHEN</b>
LED SENSOR ERROR	LED thermal sensor damaged (open or in short circuit). Unit immediately goes in black-out.
LED OVERTEMP	LED temperature detected over 100°C. Unit immediately goes in black-out.
DRV1 MICRO SENSOR ERROR	Micro controller thermal sensor on LED Driver Master board damaged (open or in short circuit). Unit immediately goes in black-out.
DRV1 MICRO OVERTEMP	Temperature of Micro controller on LED Driver Master board detected over 100°C. Unit immediately goes in black-out.
DRV2 MICRO SENSOR ERROR	Micro controller thermal sensor on LED Driver Slave board damaged (open or in short circuit). Unit immediately goes in black-out.
DRV2 MICRO OVERTEMP	Temperature of Micro controller on LED Driver Slave board detected over 100°C. Unit immediately goes in black-out.
DRV1 NTC1 SENSOR ERROR	Thermal sensor on outputs 6 and 7 of LED Driver Master board damaged (open or in short circuit). Unit immediately goes in black-out.
DRV1 NTC1 OVERTEMP	Temperature detected over 100°C on outputs 6 and 7 of LED Driver Master board. Unit immediately goes in black-out.
DRV1 NTC3 SENSOR ERROR	Thermal sensor on outputs 2 and 3 of LED Driver Master board damaged (open or in short circuit). Unit immediately goes in black-out.
DRV1 NTC3 OVERTEMP	Temperature detected over 100°C on outputs 2 and 3 of LED Driver Master board. Unit immediately goes in black-out.
DRV2 NTC1 SENSOR ERROR	Thermal sensor on outputs 6 and 7 of LED Driver Slave board damaged (open or in short circuit). Unit immediately goes in black-out.
DRV2 NTC1 OVERTEMP	Temperature detected over 100°C on outputs 6 and 7 of LED Driver Slave board. Unit immediately goes in black-out.
DRV2 NTC3 SENSOR ERROR	Thermal sensor on outputs 2 and 3 of LED Driver Slave board damaged (open or in short circuit). Unit immediately goes in black-out.
DRV2 NTC3 OVERTEMP	Temperature detected over 100°C on outputs 2 and 3 of LED Driver Slave board. Unit immediately goes in black-out.

## **14- ERROR MESSAGES**

<b>ERROR SHOWED ON DISPLAY</b>	<b>APPEARS WHEN</b>
PSU SENSOR ERROR	PSU thermal sensor damaged (open or in short circuit). Unit immediately goes in black-out.
PSU OVERTEMP	PSU temperature detected over 100°C. Unit immediately goes in black-out.
DRV2 COMMUNICATION ERROR	Communication problem between LED Driver Master board and LED Driver Slave board.
DRV1 LOW SUPPLY VOLTAGE	LED Driver Master board input voltage <36Vdc.
DRV1 HIGH SUPPLY VOLTAGE	LED Driver Master board input voltage >50Vdc.
DRV2 LOW SUPPLY VOLTAGE	LED Driver Slave board input voltage <36Vdc.
DRV2 HIGH SUPPLY VOLTAGE	LED Driver Slave board input voltage >50Vdc.

## **15- PERIODIC CLEANING**

### **Lenses Front Glass:**

The dust can reduce the luminous output substantially. Regularly clean the lenses front glass using a soft cotton cloth, dampened with a specialist glasses cleaning solution.

## **16- PERIODIC CONTROLS**

### **Mechanical parts:**

Periodically check all mechanical parts and the gaskets. Please refer to an authorised DTS service centre for any operation involving of the unit if needed.

### **Electrical components:**

Check for unit proper earthing. Please refer to an authorised DTS service centre for any operation involving of the unit if needed.

### **Fuse replacement:**

Using a multimeter, test the condition of the fuse, replacing it with one of equivalent type. Disconnect mains prior to remove the fuse to be tested.

**Attention: the fuse replacement must be made by DTS personnel or experienced person.**

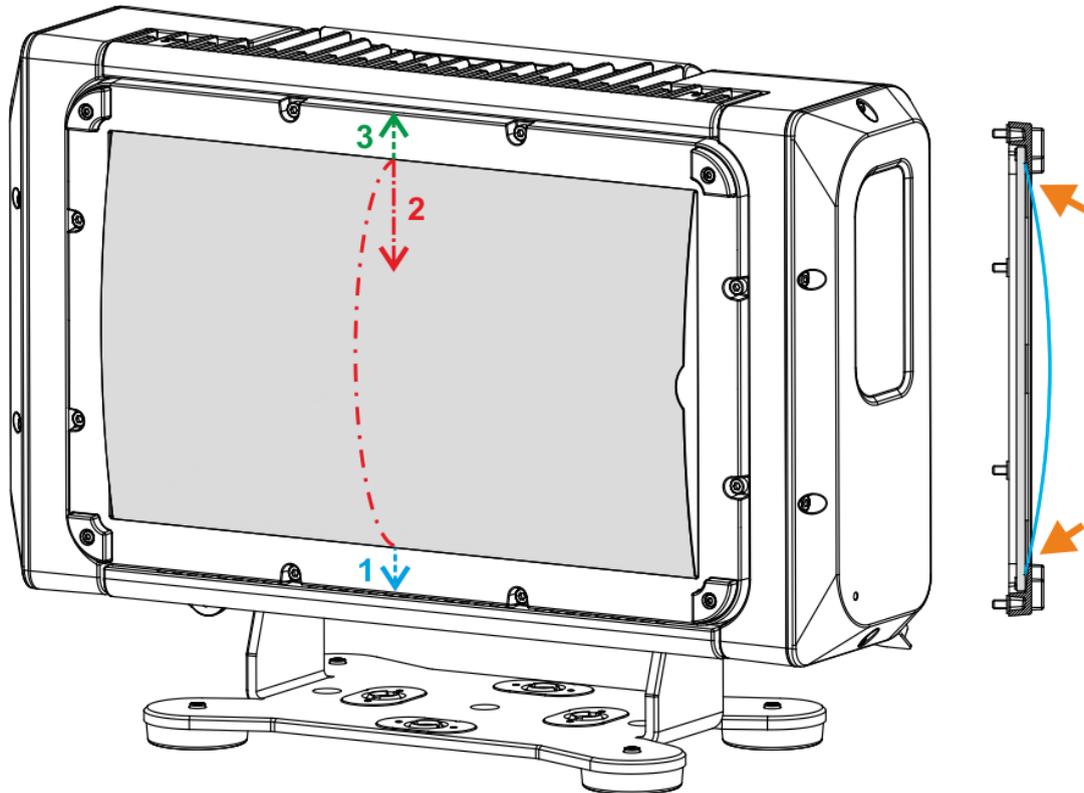
### **17- HOLOGRAPHIC FILTER INSTALLATION**

X-BRICK offers a range of holographic filters quickly interchangeable (no tools required).

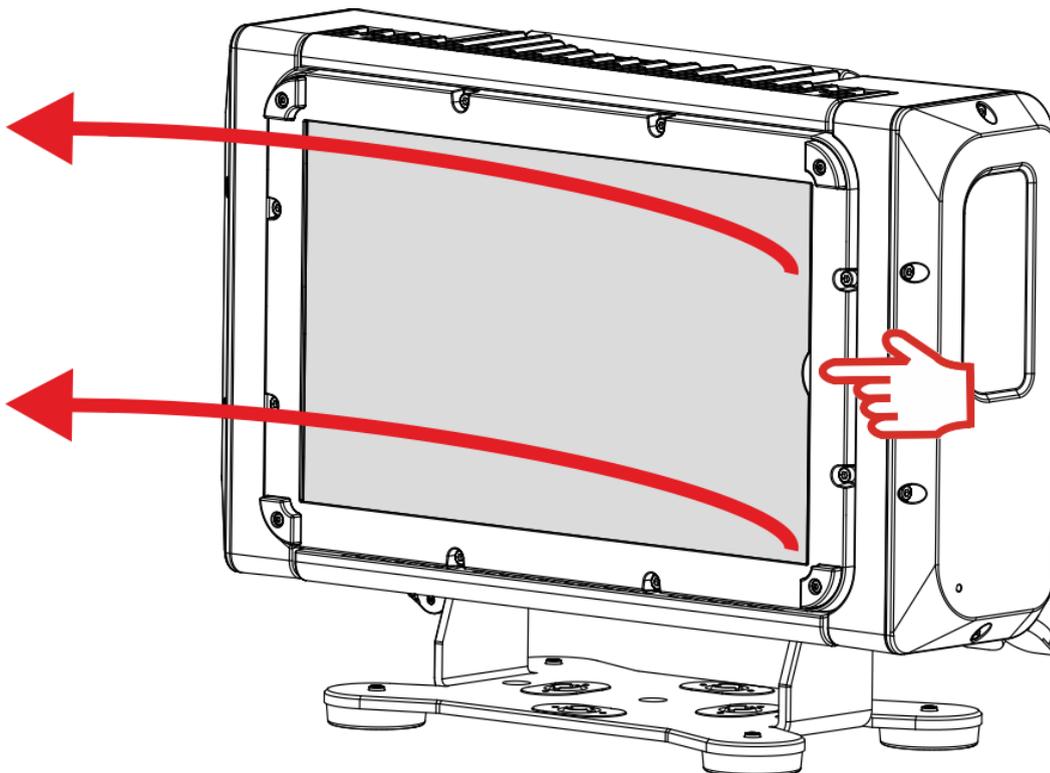
To properly install the holographic filter:

- 1 - Put in place the bottom edge of the filter.
- 2 - Bend the filter.
- 3 - Insert the top edge of the filter.

For permanent outdoor installation, the holographic filter can also be mounted internally.



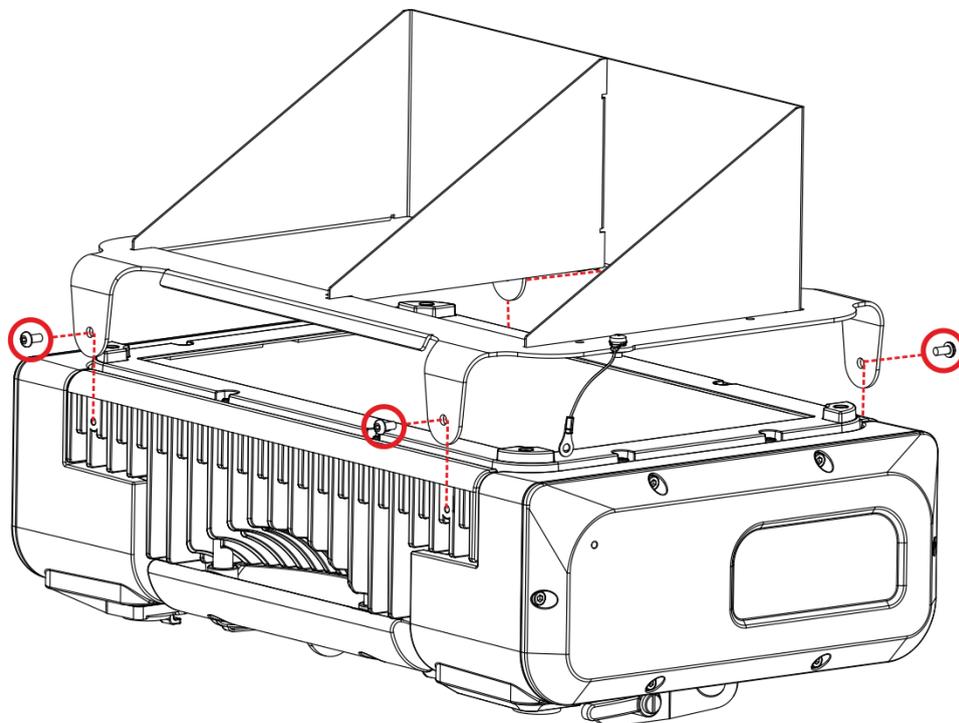
To remove the filter simply lift with a finger the filter on the side with the opening as shown in the picture.



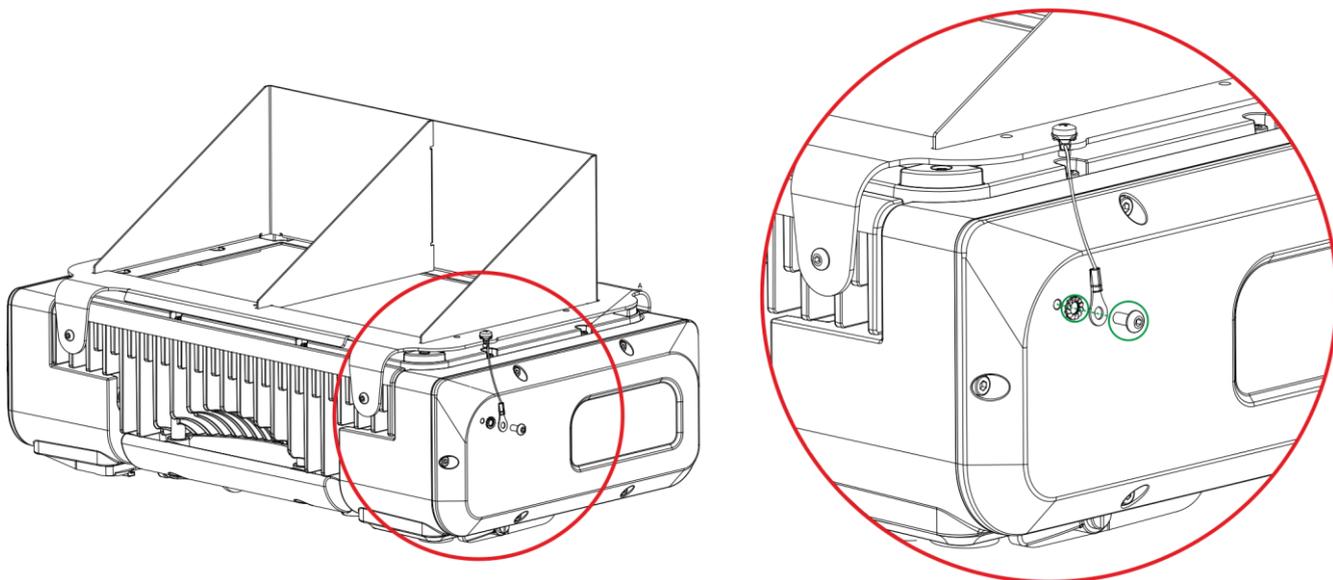
## **18- VISOR INSTALLATION**

The Visor for X-BRICK (code 03.LA.236.11) is available on demand.

Fix the Visor on the X-BRICK by using the 4 marked screws previously removed from the unit body.



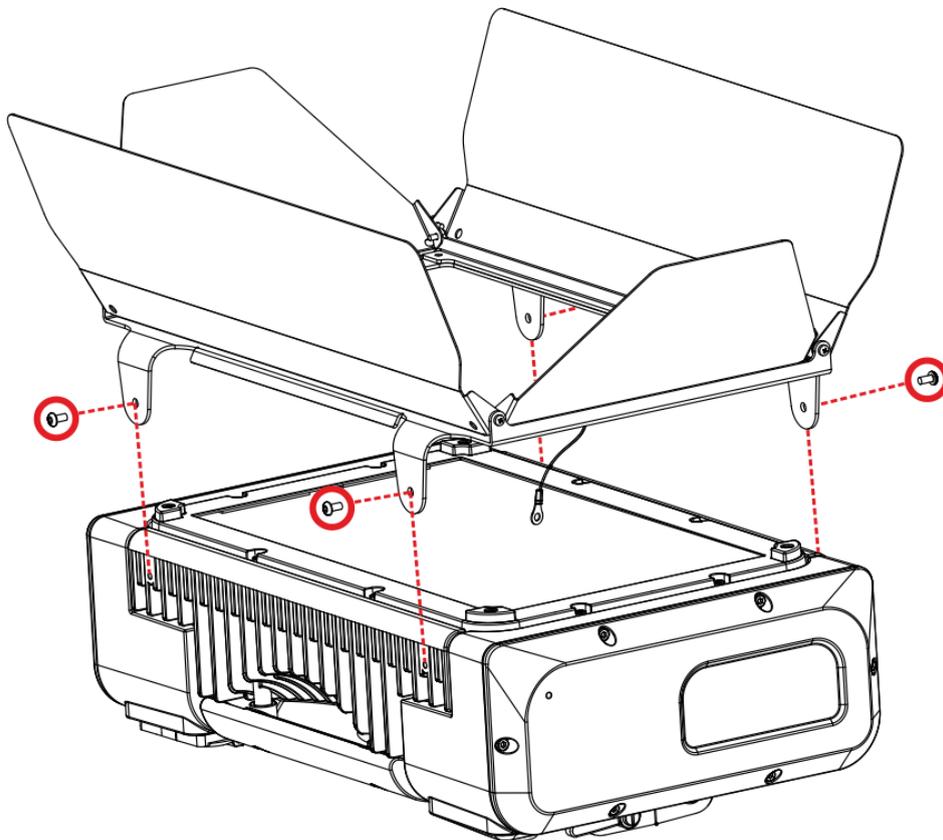
Once installed, fix the safety cable on the side cap by using the marked screw and the washer provided in the box as shown in the picture.



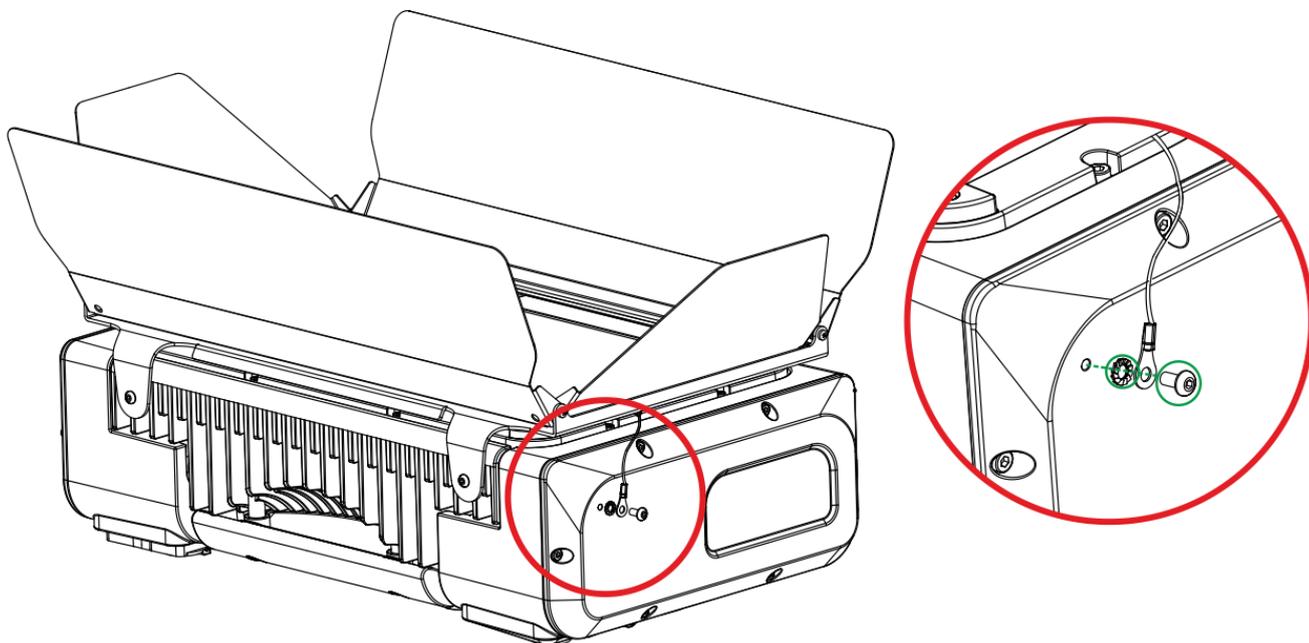
## **19- BARNDOOR INSTALLATION**

The Barndoor for X-BRICK (code 03.LA.237.11) is available on demand.

Fix the Barndoor on the X-BRICK by using the 4 marked screws previously removed from the unit body.



Once installed, fix the safety cable on the side cap by using the marked screw and the washer provided in the box as shown in the picture.



**20- LED PIXEL INVERT FUNCTION REFERENCES****LED PIXEL NORMAL  
(ON THE GROUND)****LED PIXEL REVERSE  
(ON THE GROUND)****LED PIXEL NORMAL  
(SUSPENDED)****LED PIXEL REVERSE  
(SUSPENDED)**

**21- DMX PROTOCOL****1. “STANDARD” mode (10 DMX channels)**

- 1 RED**
- 2 GREEN**
- 3 BLUE**
- 4 WHITE**
- 5 SHUTTER**
- 6 DIMMER**
- 7 DIMMER FINE**
- 8 CCT**
- 9 MACRO COLOR**
- 10 FUNCTIONS**

<b>Dmx Personality 1: STANDARD (10 channels)</b>			
<b>#</b>	<b>Name</b>	<b>Dmx Levels Ranges And Functions</b>	
1	<b>RED</b>	0..255	Proportional color from min to max
2	<b>GREEN</b>	0..255	Proportional color from min to max
3	<b>BLUE</b>	0..255	Proportional color from min to max
4	<b>WHITE</b>	0..255	Proportional color from min to max
5	<b>SHUTTER</b>	0..9	Blackout
		10..19	Open
		20..29	Blackout
		30..119	Strobe (from 3,27 s to 30 ms)
		120..149	Pulse up (from 42,6 s to 120 ms)
		150..179	Pulse down (from 42,6 s to 120 ms)
		180..204	Random strobe
		205..229	Full independent random strobe
		230..255	Open
6	<b>DIMMER</b>	0..255	Proportional master dimmer From Off (lev. 0) to Full On (lev.255)
7	<b>DIMMER FINE</b>	0..255	Proportional master dimmer fine From Off (lev. 0) to Full On (lev.255)
8	<b>CCT</b>	0..10	No Function
		11..255	Correlated colour temperature from 2700K to 8000K.
		Relevant CCT values:	
		11	2700 K
		33	3000 K
		55	3200 K
		77	3500 K
		99	4000 K
		121	4500 K
		143	5000 K
		165	5600 K
		187	6000 K
		209	6500 K
		232	7000 K
		255	8000 K

<b>Dmx Personality 1: STANDARD (10 channels)</b>			
<b>#</b>	<b>Name</b>	<b>Dmx Levels Ranges And Functions</b>	
9	<b>MACRO COLOR</b>	0..14	No function
		15..24	COL 1: LEE FILTER NO. 19 "FIRE" (R255 G64 B0 W0)
		25..34	COL 2: LEE FILTER NO. 20 "MEDIUM AMBER" (R255 G146 B0 W0)
		35..44	COL 3: LEE FILTER NO. 25 "SUNSET RED" (R255 G111 B23 W0)
		45..54	COL 4: LEE FILTER NO. 101 "YELLOW" (R255 G186 B0 W0)
		55..64	COL 5: LEE FILTER NO. 104 "DEEP AMBER" (R255 G182 B0 W0)
		65..74	COL 6: LEE FILTER NO. 106 "PRIMARY RED" (R255 G0 B0 W0)
		75..84	COL 7: LEE FILTER NO. 111 "DARK PINK" (R255 G0 B0 W157)
		85..94	COL 8: LEE FILTER NO. 113 "MAGENTA" (R255 G28 B28 W45)
		95..104	COL 9: LEE FILTER NO. 118 "LIGHT BLUE" (R0 G252 B115 W101)
		105..114	COL 10: LEE FILTER NO. 122 "FERN GREEN" (R171 G255 B0 W70)
		115..124	COL 11: LEE FILTER NO. 126 "MAUVE" (R255 G0 B118 W0)
		125..134	COL 12: LEE FILTER NO. 137 "LAVANDER" (R243 G224 B112 W97)
		135..144	COL 13: LEE FILTER NO. 139 "PRIMARY GREEN" (R87 G255 B0 W0)
		145..154	COL 14: LEE FILTER NO. 147 "APRICOT" (R204 G127 B23 W42)
		155..164	COL 15: LEE FILTER NO. 154 "PALE ROSE" (R255 G167 B0 W139)
		165..174	COL 16: LEE FILTER NO. 181 "CONGO BLUE" (R94 G107 B255 W0)
		175..184	RGB RAINBOW COLOR MIXING: SPEED 1 (6 SEC.)
		185..194	RGB RAINBOW COLOR MIXING: SPEED 2 (15 SEC.)
		195..204	RGB RAINBOW COLOR MIXING: SPEED 3 (30 SEC.)
		205..214	RGB RAINBOW COLOR MIXING: SPEED 4 (45 SEC.)
		215..224	RGB RAINBOW COLOR MIXING: SPEED 5 (60 SEC.)
		225..234	RGB RAINBOW COLOR MIXING: SPEED 6 (120 SEC.)
		235..244	RGB RAINBOW COLOR MIXING: SPEED 7 (150 SEC.)
245..255	RGB RAINBOW COLOR MIXING: SPEED 8 (180 SEC.)		
10	<b>FUNCTIONS</b>  Activated by staying on desired option for 5 seconds	0..14	No function
		15..24	SMOOTH OFF
		25..26	SMOOTH 1
		27..28	SMOOTH 2
		29..30	SMOOTH 3
		31..32	SMOOTH 4 (DEFAULT)
		33..34	SMOOTH 5
		35..36	SMOOTH 6
		37..38	SMOOTH 7
		39..40	SMOOTH 8
		41..42	SMOOTH 9
		43..44	SMOOTH 10
		45..46	SMOOTH 11
		47..48	SMOOTH 12
		49..50	SMOOTH 13
		51..52	SMOOTH 14
		53..54	SMOOTH 15
55..56	SMOOTH 16		

Dmx Personality 1: STANDARD (10 channels)			
#	Name	Dmx Levels Ranges And Functions	
10	FUNCTIONS  Activated by staying on desired option for 5 seconds	57..58	SMOOTH 17
		59..60	SMOOTH 18
		61..62	SMOOTH 19
		63..64	SMOOTH 20
		65..66	GAMMA CORRECTION QUADRATIC (DEFAULT)
		67..68	GAMMA CORRECTION LINEAR
		69..70	GAMMA CORRECTION S-CURVE
		71..72	GAMMA CORRECTION 2.2
		73..74	RESERVED
		75..76	RESERVED
		77..78	RESERVED
		79..80	CROSSFADE CURVE INTERMEDIATE
		81..82	CROSSFADE CURVE TRANSITION (DEFAULT)
		83..84	RESERVED
		85..104	OUTPUT FREQUENCY 610 Hz
		105	OUTPUT FREQUENCY 800 Hz
		106	OUTPUT FREQUENCY 1000 Hz (DEFAULT)
		107	OUTPUT FREQUENCY 1500 Hz
		108	OUTPUT FREQUENCY 2000 Hz
		109	OUTPUT FREQUENCY 2500 Hz
		110	OUTPUT FREQUENCY 3000 Hz
		111	OUTPUT FREQUENCY 3500 Hz
		112	OUTPUT FREQUENCY 4000 Hz
		113	OUTPUT FREQUENCY 4500 Hz
		114	OUTPUT FREQUENCY 5000 Hz
		115..134	RESERVED
		135..144	RESERVED
		145..154	RESERVED
		155..164	DISPLAY STAND BY DISABLED (DEFAULT)
		165..172	DISPLAY STAND BY ENABLED
		173..174	DISPLAY STAND BY FORCED ENABLED
		175..176	NO DMX ACTION – KEEP LAST DMX (DEFAULT)
		177..178	NO DMX ACTION – BLACK OUT
		179..180	NO DMX ACTION – RGB@100% (WHITE CHANNEL OFF)
		181..182	NO DMX ACTION – CHPR (PROGRAM STEPS 01..16) WAIT and SPEED time selectable via "NDMX>PROGRAM 1-16" menu
		183..184	NO DMX ACTION – CUSTOM (RGBW values selectable via "NDMX>CUSTOM" menu or via RDM Custom PID)
		185..194	RESERVED
		195..204	RESERVED
		205..214	RESERVED
		215..224	RESERVED
		225..228	RESERVED
		229..230	RESERVED
231..232	RESERVED		
233..234	RESERVED		
235..242	FAN STANDARD MODE (DEFAULT)		
243..244	FAN AUTO MODE		
245..250	FAN SILENT MODE		
251..252	FAN ULTRA SILENT MODE		
253..255	SET DEFAULTS FOR ALL FUNCTION CHANNEL PARAMETERS		

## 2. "CHASE" mode (23 DMX channels) (Default)

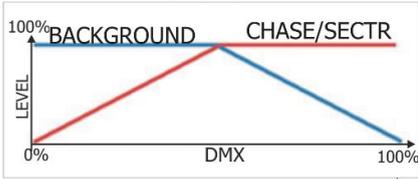
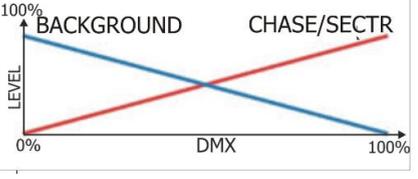
- 1 RED BACKGROUND
- 2 GREEN BACKGROUND
- 3 BLUE BACKGROUND
- 4 WHITE BACKGROUND
- 5 SHUTTER
- 6 DIMMER
- 7 DIMMER FINE
- 8 CCT BACKGROUND
- 9 MACRO COLOR BACKGROUND
- 10 FUNCTIONS
- 11 BACKGROUND SELECTION
- 12 COLOR MERGING MODE
- 13 CROSSFADE BACKGROUND/CHASE
- 14 CHASE SELECTION
- 15 CHASE RED
- 16 CHASE GREEN
- 17 CHASE BLUE
- 18 CHASE WHITE
- 19 CHASE STROBE (Priority on SHUTTER channel)
- 20 CHASE SIZE/SPEED
- 21 CHASE X-FADE
- 22 CHASE OFFSET
- 23 CHASE FADE TIME

Dmx Personality 2: CHASE (23 channels)			
#	Name	Dmx Levels Ranges And Functions	
1	<b>RED Background</b>	0..255	Proportional color from min to max
2	<b>GREEN Background</b>	0..255	Proportional color from min to max
3	<b>BLUE Background</b>	0..255	Proportional color from min to max
4	<b>WHITE Background</b>	0..255	Proportional color from min to max
5	<b>SHUTTER</b>	0..9	Blackout
		10..19	Open
		20..29	Blackout
		30..119	Strobe (from 3,27 s to 30 ms)
		120..149	Pulse up (from 42,6 s to 120 ms)
		150..179	Pulse down (from 42,6 s to 120 ms)
		180..204	Random strobe
		205..229	Full independent random strobe
		230..255	Open
6	<b>DIMMER</b>	0..255	Proportional master dimmer From Off (lev. 0) to Full On (lev.255)
7	<b>DIMMER FINE</b>	0..255	Proportional master dimmer fine From Off (lev. 0) to Full On (lev.255)
8	<b>CCT Background</b>	0..10	No Function
		11..255	Correlated colour temperature from 2700K to 8000K.
		Relevant CCT values:	
		11	2700 K
		33	3000 K
		55	3200 K
		77	3500 K
		99	4000 K
		121	4500 K
		143	5000 K
		165	5600 K
		187	6000 K
		209	6500 K
		232	7000 K
		255	8000 K

<b>Dmx Personality 2: CHASE (23 channels)</b>			
<b>#</b>	<b>Name</b>	<b>Dmx Levels Ranges And Functions</b>	
9	<b>MACRO COLOR Background</b>	0..14	No function
		15..24	COL 1: LEE FILTER NO. 19 "FIRE" (R255 G64 B0 W0)
		25..34	COL 2: LEE FILTER NO. 20 "MEDIUM AMBER" (R255 G146 B0 W0)
		35..44	COL 3: LEE FILTER NO. 25 "SUNSET RED" (R255 G111 B23 W0)
		45..54	COL 4: LEE FILTER NO. 101 "YELLOW" (R255 G186 B0 W0)
		55..64	COL 5: LEE FILTER NO. 104 "DEEP AMBER" (R255 G182 B0 W0)
		65..74	COL 6: LEE FILTER NO. 106 "PRIMARY RED" (R255 G0 B0 W0)
		75..84	COL 7: LEE FILTER NO. 111 "DARK PINK" (R255 G0 B0 W157)
		85..94	COL 8: LEE FILTER NO. 113 "MAGENTA" (R255 G28 B28 W45)
		95..104	COL 9: LEE FILTER NO. 118 "LIGHT BLUE" (R0 G252 B115 W101)
		105..114	COL 10: LEE FILTER NO. 122 "FERN GREEN" (R171 G255 B0 W70)
		115..124	COL 11: LEE FILTER NO. 126 "MAUVE" (R255 G0 B118 W0)
		125..134	COL 12: LEE FILTER NO. 137 "LAVANDER" (R243 G224 B112 W97)
		135..144	COL 13: LEE FILTER NO. 139 "PRIMARY GREEN" (R87 G255 B0 W0)
		145..154	COL 14: LEE FILTER NO. 147 "APRICOT" (R204 G127 B23 W42)
		155..164	COL 15: LEE FILTER NO. 154 "PALE ROSE" (R255 G167 B0 W139)
		165..174	COL 16: LEE FILTER NO. 181 "CONGO BLUE" (R94 G107 B255 W0)
		175..184	RGB RAINBOW COLOR MIXING: SPEED 1 (6 SEC.)
		185..194	RGB RAINBOW COLOR MIXING: SPEED 2 (15 SEC.)
		195..204	RGB RAINBOW COLOR MIXING: SPEED 3 (30 SEC.)
		205..214	RGB RAINBOW COLOR MIXING: SPEED 4 (45 SEC.)
		215..224	RGB RAINBOW COLOR MIXING: SPEED 5 (60 SEC.)
		225..234	RGB RAINBOW COLOR MIXING: SPEED 6 (120 SEC.)
235..244	RGB RAINBOW COLOR MIXING: SPEED 7 (150 SEC.)		
245..255	RGB RAINBOW COLOR MIXING: SPEED 8 (180 SEC.)		
10	<b>FUNCTIONS</b>  Activated by staying on desired option for 5 seconds	0..14	No function
		15..24	SMOOTH OFF
		25..26	SMOOTH 1
		27..28	SMOOTH 2
		29..30	SMOOTH 3
		31..32	SMOOTH 4 (DEFAULT)
		33..34	SMOOTH 5
		35..36	SMOOTH 6
		37..38	SMOOTH 7
		39..40	SMOOTH 8
		41..42	SMOOTH 9
		43..44	SMOOTH 10
		45..46	SMOOTH 11
		47..48	SMOOTH 12
		49..50	SMOOTH 13
51..52	SMOOTH 14		

<b>Dmx Personality 2: CHASE (23 channels)</b>			
<b>#</b>	<b>Name</b>	<b>Dmx Levels Ranges And Functions</b>	
10	<b>FUNCTIONS</b>  Activated by staying on desired option for 5 seconds	53..54	SMOOTH 15
		55..56	SMOOTH 16
		57..58	SMOOTH 17
		59..60	SMOOTH 18
		61..62	SMOOTH 19
		63..64	SMOOTH 20
		65..66	GAMMA CORRECTION QUADRATIC (DEFAULT)
		67..68	GAMMA CORRECTION LINEAR
		69..70	GAMMA CORRECTION S-CURVE
		71..72	GAMMA CORRECTION 2.2
		73..74	RESERVED
		75..76	RESERVED
		77..78	RESERVED
		79..80	CROSSFADE CURVE INTERMEDIATE
		81..82	CROSSFADE CURVE TRANSITION (DEFAULT)
		83..84	RESERVED
		85..104	OUTPUT FREQUENCY 610 Hz
		105	OUTPUT FREQUENCY 800 Hz
		106	OUTPUT FREQUENCY 1000 Hz (DEFAULT)
		107	OUTPUT FREQUENCY 1500 Hz
		108	OUTPUT FREQUENCY 2000 Hz
		109	OUTPUT FREQUENCY 2500 Hz
		110	OUTPUT FREQUENCY 3000 Hz
		111	OUTPUT FREQUENCY 3500 Hz
		112	OUTPUT FREQUENCY 4000 Hz
		113	OUTPUT FREQUENCY 4500 Hz
		114	OUTPUT FREQUENCY 5000 Hz
		115..134	RESERVED
		135..144	RESERVED
		145..154	RESERVED
		155..164	DISPLAY STAND BY DISABLED (DEFAULT)
		165..172	DISPLAY STAND BY ENABLED
173..174	DISPLAY STAND BY FORCED ENABLED		
175..176	NO DMX ACTION – KEEP LAST DMX (DEFAULT)		
177..178	NO DMX ACTION – BLACK OUT		
179..180	NO DMX ACTION – RGB@100% (WHITE CHANNEL OFF)		
181..182	NO DMX ACTION – CHPR (PROGRAM STEPS 01..16) WAIT and SPEED time selectable via "NDMX>PROGRAM 1-16" menu		
183..184	NO DMX ACTION – CUSTOM (RGBW values selectable via "NDMX>CUSTOM" menu or via RDM Custom PID)		
185..194	RESERVED		
195..204	RESERVED		
205..214	RESERVED		
215..224	RESERVED		
225..228	RESERVED		
229..230	LED PIXEL NORMAL (DEFAULT)		
231..232	LED PIXEL REVERSE		

<b>Dmx Personality 2: CHASE (23 channels)</b>			
<b>#</b>	<b>Name</b>	<b>Dmx Levels Ranges And Functions</b>	
10	<b>FUNCTIONS</b>  Activated by staying on desired option for 5 seconds	233..234	RESERVED
		235..242	FAN STANDARD MODE (DEFAULT)
		243..244	FAN AUTO MODE
		245..250	FAN SILENT MODE
		251..252	FAN ULTRA SILENT MODE
		253..255	SET DEFAULTS FOR ALL FUNCTION CHANNEL PARAMETERS
11	<b>BACKGROUND SELECTION</b>	000..009	All Sectors Active
		010..011	Sector 1
		012.013	Sector 2
		014.015	Sector 3
		016.017	Sector 4
		018.019	Sector 1+2
		020.021	Sector 2+4
		022.023	Sector 3+4
		024.025	Sector 1+3
		026.027	Sector 1+4
		028..029	Sector 2+3
		030..031	Sector 1+2+4
		032..033	Sector 2+3+4
		034..035	Sector 1+3+4
		036..037	Sector 1+2+4
		038..039	All Sectors Inactive
040.255	Reserved – no Function – (same as All Sectors Active)		
12	<b>COLOUR MERGING MODE</b>	0..009	TRANSPARENT MODE (foreground has priority, black opacity 0%)
		010.019	STANDARD MODE (foreground has priority, black opacity 100%)
		020.029	MAXIMUM MODE
		030.039	MULTIPLY MODE
		040.049	ADDITION MODE
		050.059	SUBTRACTION MODE
		060..069	INVERT SUBCTRACTION MODE
		070..162	FOREGROUND ONLY
		163..255	BACKGROUND ONLY

Dmx Personality 2: CHASE (23 channels)			
#	Name	Dmx Levels Ranges And Functions	
13	<b>CROSSFADE</b>  <b>BACKGROUND / CHASE</b>	0..255	<p>CROSSFADE BETWEEN BACKGROUND AND CHASE</p> <p><b>TRANSITION (Default):</b>            0= BACKGROUND @ 100% and Chase@0%            128= BACKGROUND @ 100% and Chase@100%            255= Chase@100% and BACKGROUND @0%</p> 
			<p><b>INTERMEDIATE:</b>            0= BACKGROUND @ 100% and Chase@0%            128= BACKGROUND @ 50% and Chase@50%            255= Chase@100% and BACKGROUND @0%</p> 
14	<b>CHASE SELECTION</b>	000..009	No Function – All Sectors Inactive
		010.011	Sector 1
		012.013	Sector 2
		014.015	Sector 3
		016.017	Sector 4
		018.019	Sector 1+2
		020.021	Sector 2+4
		022.023	Sector 3+4
		024.025	Sector 1+3
		026.027	Sector 1+4
		028..029	Sector 2+3
		030..031	Sector 1+2+4
		032..033	Sector 2+3+4
		034..035	Sector 1+3+4
		036..037	Sector 1+2+3
		038..039	All Sectors Active
		040..171	Dynamic Macro Dimmers 1..66 – 2 steps for each Macro
172..233	Dynamic Macro Colors 1..31 – 2 steps for each Macro		
234..240	RESERVED		

<b>Dmx Personality 2: CHASE (23 channels)</b>			
<b>#</b>	<b>Name</b>	<b>Dmx Levels Ranges And Functions</b>	
14	<b>CHASE SELECTION</b>	241	Histogram Left Z Speed is Number of LEDs "ON" from left up side First N LEDs on the left are on, depending on SPEED channel – Z shape
		242	Histogram Right Z Speed is Number of LEDs on from Right down side First N LEDs on the Right are on, depending on SPEED channel – Z shape
		243	Histogram Left C Speed is Number of LEDs "ON" from left up side First N LEDs on the left are on, depending on SPEED channel – C shape
		244	Histogram Right C Speed is Number of LEDs on from Right down side First N LEDs on the Right are on, depending on SPEED channel – C shape
		245	Histogram Multicolour Left Z Speed is Number of LEDs "ON" from left up side First N LEDs on the left are on with rainbow colours, depending on SIZE/SPD channel – Z shape
		246	Histogram Multicolour Right Z Speed is Number of LEDs on from Right down side First N LEDs on the Right are on with rainbow colours, depending on SIZE/SPD channel – Z shape
		247	Histogram Multicolour Left C Speed is Number of LEDs "ON" from left up side First N LEDs on the left are on with rainbow colours, depending on SIZE/SPD channel – C shape
		248	Histogram Multicolour Right C Speed is Number of LEDs on from Right down side First N LEDs on the Right are on with rainbow colours, depending on SIZE/SPD channel – C shape
		249	Wave Right Z A rainbow with size depending on COLOR channel scrolls to the right with speed dependent on SPEED channel — Z shape
		250	Wave Left Z A rainbow with size depending on COLOR channel scrolls to the left with speed dependent on SPEED channel – Z shape
		251	Wave Right C A rainbow with size depending on COLOR channel scrolls to the right with speed dependent on SPEED channel – C shape
		252	Wave Left C A rainbow with size depending on COLOR channel scrolls to the left with speed dependent on SPEED channel – C shape
		253	Pulse SPEED is Effect Speed. A strip of multicolour pixels grows and shrinks
		254.255	Random Pick Every 15 s a new random effect is chosen from the above spacial effects (240..253) effects or Dynamic Macro Colors (272..233)
15	<b>CHASE RED</b>	0..255	Chase colour – RED component
16	<b>CHASE GREEN</b>	0..255	Chase colour – GREEN component
17	<b>CHASE BLUE</b>	0..255	Chase colour – BLUE component
18	<b>CHASE WHITE</b>	0..255	Chase colour – WHITE component

<b>Dmx Personality 2: CHASE (23 channels)</b>			
<b>#</b>	<b>Name</b>	<b>Dmx Levels Ranges And Functions</b>	
19	<b>CHASE STROBE</b> Priority on SHUTTER channel	0..9	No Function : SUBJECT TO CHANNEL 5 SHUTTER (DEFAULT)
		10..19	Open
		20..29	Blackout
		30..119	Strobe (from 3,27 s to 30 ms)
		120..149	Pulse up (from 42,6 s to 120 ms)
		150..179	Pulse down (from 42,6 s to 120 ms)
		180..204	Random strobe
		205..229	Reserved – No Function SUBJECT TO CHANNEL 5 SHUTTER
		230..255	Open
20	<b>CHASE SIZE/SPEED</b>	0..127	Indexed 0..360°
		128..179	Left rotation fast to slow
		180..202	stop
		203..255	Right rotation slow to fast
21	<b>CHASE X-FADE</b>	0..255	Transition between Steps of the same Chase from Snap/instant to Smooth. 0 = 0% Transition (Snap/instant Transition) 255 = 100% Transition (Smooth Transition)
22	<b>CHASE OFFSET</b>	0..255	Chase offset (0° to 360°) - phase shift or shape modifier
23	<b>CHASE FADE TIME</b>	0..255	Fade Time transition between two different Chases 0= no Fade – 1..255 Fade Time from Min (0s) to Max (4s)

### 3. “EXTENDED” mode (29 DMX channels)

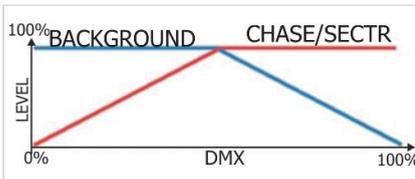
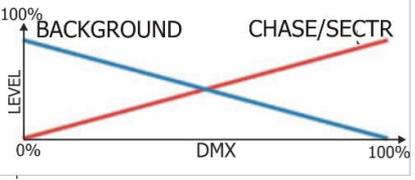
- 1 RED BACKGROUND
- 2 GREEN BACKGROUND
- 3 BLUE BACKGROUND
- 4 WHITE BACKGROUND
- 5 SHUTTER
- 6 DIMMER
- 7 DIMMER FINE
- 8 CCT BACKGROUND
- 9 MACRO COLOR BACKGROUND
- 10 FUNCTIONS
- 11 BACKGROUND SELECTION
- 12 COLOR MERGING MODE
- 13 CROSSFADE BACKGROUND/CHASE
- 14 SECTOR 1 RED
- 15 SECTOR 1 GREEN
- 16 SECTOR 1 BLUE
- 17 SECTOR 1 WHITE
- 18 SECTOR 2 RED
- 19 SECTOR 2 GREEN
- 20 SECTOR 2 BLUE
- 21 SECTOR 2 WHITE
- 22 SECTOR 3 RED
- 23 SECTOR 3 GREEN
- 24 SECTOR 3 BLUE
- 25 SECTOR 3 WHITE
- 26 SECTOR 4 RED
- 27 SECTOR 4 GREEN
- 28 SECTOR 4 BLUE
- 29 SECTOR 4 WHITE

<b>Dmx Personality 3: EXTENDED ( 29 channels)</b>			
<b>#</b>	<b>Name</b>	<b>Dmx Levels Ranges And Functions</b>	
1	<b>RED Background</b>	0..255	Proportional color from min to max
2	<b>GREEN Background</b>	0..255	Proportional color from min to max
3	<b>BLUE Background</b>	0..255	Proportional color from min to max
4	<b>WHITE Background</b>	0..255	Proportional color from min to max
5	<b>SHUTTER</b>	0..9	Blackout
		10..19	Open
		20..29	Blackout
		30..119	Strobe (from 3,27 s to 30 ms)
		120..149	Pulse up (from 42,6 s to 120 ms)
		150..179	Pulse down (from 42,6 s to 120 ms)
		180..204	Random strobe
		205..229	Full independent random strobe
		230..255	Open
6	<b>DIMMER</b>	0..255	Proportional master dimmer From Off (lev. 0) to Full On (lev.255)
7	<b>DIMMER FINE</b>	0..255	Proportional master dimmer fine From Off (lev. 0) to Full On (lev.255)
8	<b>CCT Background</b>	0..10	No Function
		11..255	Correlated colour temperature from 2700K to 8000K.
		Relevant CCT values:	
		11	2700 K
		33	3000 K
		55	3200 K
		77	3500 K
		99	4000 K
		121	4500 K
		143	5000 K
		165	5600 K
		187	6000 K
		209	6500 K
		232	7000 K
255	8000 K		

<b>Dmx Personality 3: EXTENDED (29 channels)</b>			
<b>#</b>	<b>Name</b>	<b>Dmx Levels Ranges And Functions</b>	
9	<b>MACRO COLOR Back ground</b>	0..14	No function
		15..24	COL 1: LEE FILTER NO. 19 "FIRE" (R255 G64 B0 W0)*
		25..34	COL 2: LEE FILTER NO. 20 "MEDIUM AMBER" (R255 G146 B0 W0)
		35..44	COL 3: LEE FILTER NO. 25 "SUNSET RED" (R255 G111 B23 W0)
		45..54	COL 4: LEE FILTER NO. 101 "YELLOW" (R255 G186 B0 W0)
		55..64	COL 5: LEE FILTER NO. 104 "DEEP AMBER" (R255 G182 B0 W0)
		65..74	COL 6: LEE FILTER NO. 106 "PRIMARY RED" (R255 G0 B0 W0)
		75..84	COL 7: LEE FILTER NO. 111 "DARK PINK" (R255 G0 B0 W157)
		85..94	COL 8: LEE FILTER NO. 113 "MAGENTA" (R255 G28 B28 W45)
		95..104	COL 9: LEE FILTER NO. 118 "LIGHT BLUE" (R0 G252 B115 W101)
		105..114	COL 10: LEE FILTER NO. 122 "FERN GREEN" (R171 G255 B0 W70)
		115..124	COL 11: LEE FILTER NO. 126 "MAUVE" (R255 G0 B118 W0)
		125..134	COL 12: LEE FILTER NO. 137 "LAVANDER" (R243 G224 B112 W97)
		135..144	COL 13: LEE FILTER NO. 139 "PRIMARY GREEN" (R87 G255 B0 W0)
		145..154	COL 14: LEE FILTER NO. 147 "APRICOT" (R204 G127 B23 W42)
		155..164	COL 15: LEE FILTER NO. 154 "PALE ROSE" (R255 G167 B0 W139)
		165..174	COL 16: LEE FILTER NO. 181 "CONGO BLUE" (R94 G107 B255 W0)
		175..184	RGB RAINBOW COLOR MIXING: SPEED 1 (6 SEC.)
		185..194	RGB RAINBOW COLOR MIXING: SPEED 2 (15 SEC.)
		195..204	RGB RAINBOW COLOR MIXING: SPEED 3 (30 SEC.)
205..214	RGB RAINBOW COLOR MIXING: SPEED 4 (45 SEC.)		
215..224	RGB RAINBOW COLOR MIXING: SPEED 5 (60 SEC.)		
225..234	RGB RAINBOW COLOR MIXING: SPEED 6 (120 SEC.)		
235..244	RGB RAINBOW COLOR MIXING: SPEED 7 (150 SEC.)		
245..255	RGB RAINBOW COLOR MIXING: SPEED 8 (180 SEC.)		

<b>Dmx Personality 3: EXTENDED (29 channels)</b>			
<b>#</b>	<b>Name</b>	<b>Dmx Levels Ranges And Functions</b>	
10	<b>FUNCTIONS</b>  Activated by staying on desired option for 5 seconds	0..14	No function
		15..24	SMOOTH OFF
		25..26	SMOOTH 1
		27..28	SMOOTH 2
		29..30	SMOOTH 3
		31..32	SMOOTH 4 (DEFAULT)
		33..34	SMOOTH 5
		35..36	SMOOTH 6
		37..38	SMOOTH 7
		39..40	SMOOTH 8
		41..42	SMOOTH 9
		43..44	SMOOTH 10
		45..46	SMOOTH 11
		47..48	SMOOTH 12
		49..50	SMOOTH 13
		51..52	SMOOTH 14
		53..54	SMOOTH 15
		55..56	SMOOTH 16
		57..58	SMOOTH 17
		59..60	SMOOTH 18
		61..62	SMOOTH 19
		63..64	SMOOTH 20
		65..66	GAMMA CORRECTION QUADRATIC (DEFAULT)
		67..68	GAMMA CORRECTION LINEAR
		69..70	GAMMA CORRECTION S-CURVE
		71..72	GAMMA CORRECTION 2.2
		73..74	RESERVED
		75..76	RESERVED
		77..78	RESERVED
		79..80	CROSSFADE CURVE INTERMEDIATE
		81..82	CROSSFADE CURVE TRANSITION (DEFAULT)
		83..84	RESERVED
		85..104	OUTPUT FREQUENCY 610 Hz
		105	OUTPUT FREQUENCY 800 Hz
106	OUTPUT FREQUENCY 1000 Hz (DEFAULT)		
107	OUTPUT FREQUENCY 1500 Hz		
108	OUTPUT FREQUENCY 2000 Hz		
109	OUTPUT FREQUENCY 2500 Hz		
110	OUTPUT FREQUENCY 3000 Hz		
111	OUTPUT FREQUENCY 3500 Hz		
112	OUTPUT FREQUENCY 4000 Hz		
113	OUTPUT FREQUENCY 4500 Hz		
114	OUTPUT FREQUENCY 5000 Hz		
115..134	RESERVED		
135..144	RESERVED		
145..154	RESERVED		
155..164	DISPLAY STAND BY DISABLED (DEFAULT)		
165..172	DISPLAY STAND BY ENABLED		
173..174	DISPLAY STAND BY FORCED ENABLED		
175..176	NO DMX ACTION – KEEP LAST DMX (DEFAULT)		
177..178	NO DMX ACTION – BLACK OUT		
179..180	NO DMX ACTION – RGB@100% (WHITE CHANNEL OFF)		
181..182	NO DMX ACTION – CHPR (PROGRAM STEPS 01..16) WAIT and SPEED time selectable via "NDMX>PROGRAM 1-16" menu		
183..184	NO DMX ACTION – CUSTOM (RGBW values selectable via "NDMX>CUSTOM" menu or via RDM Custom PID		

<b>Dmx Personality 3: EXTENDED (29 channels)</b>			
<b>#</b>	<b>Name</b>	<b>Dmx Levels Ranges And Functions</b>	
10	<b>FUNCTIONS</b>  Activated by staying on desired option for 5 seconds	185..194	RESERVED
		195..204	RESERVED
		205..214	RESERVED
		215..224	RESERVED
		225..228	RESERVED
		229.230	LED PIXEL NORMAL (DEFAULT)
		231.232	LED PIXEL REVERSE
		233..234	RESERVED
		235..242	FAN STANDARD MODE (DEFAULT)
		243..244	FAN AUTO MODE
		245..250	FAN SILENT MODE
		251..252	FAN ULTRA SILENT MODE
		253..255	SET DEFAULTS FOR ALL FUNCTION CHANNEL PARAMETERS
11	<b>BACKGROUND SELECTION</b>	000..009	All Sectors Active
		010..011	Sector 1
		012.013	Sector 2
		014.015	Sector 3
		016.017	Sector 4
		018.019	Sector 1+2
		020.021	Sector 2+4
		022.023	Sector 3+4
		024.025	Sector 1+3
		026.027	Sector 1+4
		028..029	Sector 2+3
		030..031	Sector 1+2+4
		032..033	Sector 2+3+4
		034..035	Sector 1+3+4
		036..037	Sector 1+2+4
		038..039	All Sectors Inactive
040.255	Reserved – no Function – (same as All Sectors Active)		

Dmx Personality 3: EXTENDED (29 channels)			
#	Name	Dmx Levels Ranges And Functions	
12	<b>COLOUR MERGING MODE</b>	0..009	TRANSPARENT MODE (foreground has priority, black opacity 0%)
		010..019	STANDARD MODE (foreground has priority, black opacity 100%)
		020..029	MAXIMUM MODE
		030..039	MULTIPLY MODE
		040..049	ADDITION MODE
		050..059	SUBTRACTION MODE
		060..069	INVERT SUBCTRACTION MODE
		070..162	BACKGROUND ONLY
		163..255	BACKGROUND ONLY
13	<b>CROSSFADE BACKGROUND / CHASE</b>	0..255	<p>CROSSFADE BETWEEN BACKGROUND AND CHASE</p> <p><b>TRANSITION (Default):</b>  0= BACKGROUND @ 100% and Chase@0%  128= BACKGROUND @ 100% and Chase@ 100%  255= Chase@100% and BACKGROUND @0%</p>  <p><b>INTERMEDIATE:</b>  0= BACKGROUND @ 100% and Chase@0%  128= BACKGROUND @ 50% and Chase@50%  255= Chase@100% and BACKGROUND @0%</p> 

<b>Dmx Personality 3: EXTENDED (29 channels)</b>			
<b>#</b>	<b>Name</b>	<b>Dmx Levels Ranges And Functions</b>	
14	<b>SECTOR 1 RED</b>	0..255	Proportional RED From Off (lev. 0) to Full On (lev.255)
15	<b>SECTOR 1 GREEN</b>	0..255	Proportional GREEN From Off (lev. 0) to Full On (lev.255)
16	<b>SECTOR 1 BLUE</b>	0..255	Proportional BLUE From Off (lev. 0) to Full On (lev.255)
17	<b>SECTOR 1 WHITE</b>	0..255	Proportional WHITE From Off (lev. 0) to Full On (lev.255)
18	<b>SECTOR 2 RED</b>	0..255	Proportional RED From Off (lev. 0) to Full On (lev.255)
19	<b>SECTOR 2 GREEN</b>	0..255	Proportional GREEN From Off (lev. 0) to Full On (lev.255)
20	<b>SECTOR 2 BLUE</b>	0..255	Proportional BLUE From Off (lev. 0) to Full On (lev.255)
21	<b>SECTOR 2 WHITE</b>	0..255	Proportional WHITE From Off (lev. 0) to Full On (lev.255)
22	<b>SECTOR 3 RED</b>	0..255	Proportional RED From Off (lev. 0) to Full On (lev.255)
23	<b>SECTOR 3 GREEN</b>	0..255	Proportional GREEN From Off (lev. 0) to Full On (lev.255)
24	<b>SECTOR 3 BLUE</b>	0..255	Proportional BLUE From Off (lev. 0) to Full On (lev.255)
25	<b>SECTOR 3 WHITE</b>	0..255	Proportional WHITE From Off (lev. 0) to Full On (lev.255)
26	<b>SECTOR 4 RED</b>	0..255	Proportional RED From Off (lev. 0) to Full On (lev.255)
27	<b>SECTOR 4 GREEN</b>	0..255	Proportional GREEN From Off (lev. 0) to Full On (lev.255)
28	<b>SECTOR 4 BLUE</b>	0..255	Proportional BLUE From Off (lev. 0) to Full On (lev.255)
29	<b>SECTOR 4 WHITE</b>	0..255	Proportional WHITE From Off (lev. 0) to Full On (lev.255)

#### 4. "GLOBAL RGBW" mode (4 DMX channels)

- 1     **RED**
- 2     **GREEN**
- 3     **BLUE**
- 4     **WHITE**

<b>Dmx Personality 4: GLOBAL RGBW (4 channels)</b>			
<b>#</b>	<b>Name</b>	<b>Dmx Levels Ranges And Functions</b>	
1	<b>RED</b>	0..255	Proportional color from min to max
2	<b>GREEN</b>	0..255	Proportional color from min to max
3	<b>BLUE</b>	0..255	Proportional color from min to max
4	<b>WHITE</b>	0..255	Proportional color from min to max

## 5. "GLOBAL RGBW+SHUT+DIMM" mode (6 DMX channels)

- 1 RED
- 2 GREEN
- 3 BLUE
- 4 WHITE
- 5 SHUTTER
- 6 DIMMER

Dmx Personality 5: GLOBAL RGBW + SHUT + DIMM (6 channels)			
#	Name	Dmx Levels Ranges And Functions	
1	RED	0..255	Proportional color from min to max
2	GREEN	0..255	Proportional color from min to max
3	BLUE	0..255	Proportional color from min to max
4	WHITE	0..255	Proportional color from min to max
5	SHUTTER	0..9	Blackout
		10..19	Open
		20..29	Blackout
		30..119	Strobe (from 3,27 s to 30 ms)
		120..149	Pulse up (from 42,6 s to 120 ms)
		150..179	Pulse down (from 42,6 s to 120 ms)
		180..204	Random strobe
		205..229	Full independent random strobe
6	DIMMER	230..255	Open
		0..255	Proportional master dimmer From Off (lev. 0) to Full On (lev.255)

## 6. "GLOBAL RGBW FINE+DIM FINE" mode (10 DMX channels)

- 1 RED
- 2 RED FINE
- 3 GREEN
- 4 GREEN FINE
- 5 BLUE
- 6 BLUE FINE
- 7 WHITE
- 8 WHITE FINE
- 9 DIMMER
- 10 DIMMER FINE

Dmx Personality 6: GLOBAL RGBW FINE + DIM FINE (10 channels)			
#	Name	Dmx Levels Ranges And Functions	
1	RED	0..255	Proportional RED From Off (lev. 0) to Full On (lev.255)
2	RED FINE	0..255	Proportional RED fine From Off (lev. 0) to Full On (lev.255)
3	GREEN	0..255	Proportional GREEN From Off (lev. 0) to Full On (lev.255)
4	GREEN FINE	0..255	Proportional GREEN fine From Off (lev. 0) to Full On (lev.255)
5	BLUE	0..255	Proportional BLUE From Off (lev. 0) to Full On (lev.255)
6	BLUE FINE	0..255	Proportional BLUE fine From Off (lev. 0) to Full On (lev.255)
7	WHITE	0..255	Proportional WHITE From Off (lev. 0) to Full On (lev.255)
8	WHITE FINE	0..255	Proportional WHITE fine From Off (lev. 0) to Full On (lev.255)
9	DIMMER	0..255	Proportional master dimmer From Off (lev. 0) to Full On (lev.255)
10	DIMMER FINE	0..255	Proportional master dimmer fine From Off (lev. 0) to Full On (lev.255)

## 7. "SECTORS RGBW" mode (16 DMX channels)

- 1      **SECTOR 1 RED**
- 2      **SECTOR 1 GREEN**
- 3      **SECTOR 1 BLUE**
- 4      **SECTOR 1 WHITE**
- 5      **SECTOR 2 RED**
- 6      **SECTOR 2 GREEN**
- 7      **SECTOR 2 BLUE**
- 8      **SECTOR 2 WHITE**
- 9      **SECTOR 3 RED**
- 10     **SECTOR 3 GREEN**
- 11     **SECTOR 3 BLUE**
- 12     **SECTOR 3 WHITE**
- 13     **SECTOR 4 RED**
- 14     **SECTOR 4 GREEN**
- 15     **SECTOR 4 BLUE**
- 16     **SECTOR 4 WHITE**

Dmx Personality 7: SECTORS RGBW (16 channels)			
#	Name	Dmx Levels Ranges And Functions	
1	<b>SECTOR 1 RED</b>	0..255	Proportional RED From Off (lev. 0) to Full On (lev.255)
2	<b>SECTOR 1 GREEN</b>	0..255	Proportional GREEN From Off (lev. 0) to Full On (lev.255)
3	<b>SECTOR 1 BLUE</b>	0..255	Proportional BLUE From Off (lev. 0) to Full On (lev.255)
4	<b>SECTOR 1 WHITE</b>	0..255	Proportional WHITE From Off (lev. 0) to Full On (lev.255)
5	<b>SECTOR 2 RED</b>	0..255	Proportional RED From Off (lev. 0) to Full On (lev.255)
6	<b>SECTOR 2 GREEN</b>	0..255	Proportional GREEN From Off (lev. 0) to Full On (lev.255)
7	<b>SECTOR 2 BLUE</b>	0..255	Proportional BLUE From Off (lev. 0) to Full On (lev.255)
8	<b>SECTOR 2 WHITE</b>	0..255	Proportional WHITE From Off (lev. 0) to Full On (lev.255)
9	<b>SECTOR 3 RED</b>	0..255	Proportional RED From Off (lev. 0) to Full On (lev.255)
10	<b>SECTOR 3 GREEN</b>	0..255	Proportional GREEN From Off (lev. 0) to Full On (lev.255)
11	<b>SECTOR 3 BLUE</b>	0..255	Proportional BLUE From Off (lev. 0) to Full On (lev.255)
12	<b>SECTOR 3 WHITE</b>	0..255	Proportional WHITE From Off (lev. 0) to Full On (lev.255)
13	<b>SECTOR 4 RED</b>	0..255	Proportional RED From Off (lev. 0) to Full On (lev.255)
14	<b>SECTOR 4 GREEN</b>	0..255	Proportional GREEN From Off (lev. 0) to Full On (lev.255)
15	<b>SECTOR 4 BLUE</b>	0..255	Proportional BLUE From Off (lev. 0) to Full On (lev.255)
16	<b>SECTOR 4 WHITE</b>	0..255	Proportional WHITE From Off (lev. 0) to Full On (lev.255)

## 8. "SECTORS RGBW FINE" mode (32 DMX channels)

- 1      **SECTOR 1 RED**
- 2      **SECTOR 1 RED FINE**
- 3      **SECTOR 1 GREEN**
- 4      **SECTOR 1 GREEN FINE**
- 5      **SECTOR 1 BLUE**
- 6      **SECTOR 1 BLUE FINE**
- 7      **SECTOR 1 WHITE**
- 8      **SECTOR 1 WHITE FINE**
- 9      **SECTOR 2 RED**
- 10     **SECTOR 2 RED FINE**
- 11     **SECTOR 2 GREEN**
- 12     **SECTOR 2 GREEN FINE**
- 13     **SECTOR 2 BLUE**
- 14     **SECTOR 2 BLUE FINE**
- 15     **SECTOR 2 WHITE**
- 16     **SECTOR 2 WHITE FINE**
- 17     **SECTOR 3 RED**
- 18     **SECTOR 3 RED FINE**
- 19     **SECTOR 3 GREEN**
- 20     **SECTOR 3 GREEN FINE**
- 21     **SECTOR 3 BLUE**
- 22     **SECTOR 3 BLUE FINE**
- 23     **SECTOR 3 WHITE**
- 24     **SECTOR 3 WHITE FINE**
- 25     **SECTOR 4 RED**
- 26     **SECTOR 4 RED FINE**
- 27     **SECTOR 4 GREEN**
- 28     **SECTOR 4 GREEN FINE**
- 29     **SECTOR 4 BLUE**
- 30     **SECTOR 4 BLUE FINE**
- 31     **SECTOR 4 WHITE**
- 32     **SECTOR 4 WHITE FINE**

<b>Dmx Personality 8: SECTORS RGBW FINE (32 channels)</b>			
<b>#</b>	<b>Name</b>	<b>Dmx Levels Ranges And Functions</b>	
1	<b>SECT 1 RED</b>	0..255	Proportional RED From Off (lev. 0) to Full On (lev.255)
2	<b>SECT 1 RED FINE</b>	0..255	Proportional RED fine From Off (lev. 0) to Full On (lev.255)
3	<b>SECT 1 GREEN</b>	0..255	Proportional GREEN From Off (lev. 0) to Full On (lev.255)
4	<b>SECT 1 GREEN FINE</b>	0..255	Proportional GREEN fine From Off (lev. 0) to Full On (lev.255)
5	<b>SECT 1 BLUE</b>	0..255	Proportional BLUE From Off (lev. 0) to Full On (lev.255)
6	<b>SECT 1 BLUE FINE</b>	0..255	Proportional BLUE fine From Off (lev. 0) to Full On (lev.255)
7	<b>SECT 1 WHITE</b>	0..255	Proportional WHITE From Off (lev. 0) to Full On (lev.255)
8	<b>SECT 1 WHITE FINE</b>	0..255	Proportional WHITE fine From Off (lev. 0) to Full On (lev.255)

<b>Dmx Personality 8: SECTORS RGBW FINE (32 channels)</b>			
<b>#</b>	<b>Name</b>	<b>Dmx Levels Ranges And Functions</b>	
9	<b>SECT 2 RED</b>	0..255	Proportional RED From Off (lev. 0) to Full On (lev.255)
10	<b>SECT 2 RED FINE</b>	0..255	Proportional RED fine From Off (lev. 0) to Full On (lev.255)
11	<b>SECT 2 GREEN</b>	0..255	Proportional GREEN From Off (lev. 0) to Full On (lev.255)
12	<b>SECT 2 GREEN FINE</b>	0..255	Proportional GREEN fine From Off (lev. 0) to Full On (lev.255)
13	<b>SECT 2 BLUE</b>	0..255	Proportional BLUE From Off (lev. 0) to Full On (lev.255)
14	<b>SECT 2 BLUE FINE</b>	0..255	Proportional BLUE fine From Off (lev. 0) to Full On (lev.255)
15	<b>SECT 2 WHITE</b>	0..255	Proportional WHITE From Off (lev. 0) to Full On (lev.255)
16	<b>SECT 2 WHITE FINE</b>	0..255	Proportional WHITE fine From Off (lev. 0) to Full On (lev.255)
17	<b>SECT 3 RED</b>	0..255	Proportional RED From Off (lev. 0) to Full On (lev.255)
18	<b>SECT 3 RED FINE</b>	0..255	Proportional RED fine From Off (lev. 0) to Full On (lev.255)
19	<b>SECT 3 GREEN</b>	0..255	Proportional GREEN From Off (lev. 0) to Full On (lev.255)
20	<b>SECT 3 GREEN FINE</b>	0..255	Proportional GREEN fine From Off (lev. 0) to Full On (lev.255)
21	<b>SECT 3 BLUE</b>	0..255	Proportional BLUE From Off (lev. 0) to Full On (lev.255)
22	<b>SECT 3 BLUE FINE</b>	0..255	Proportional BLUE fine From Off (lev. 0) to Full On (lev.255)
23	<b>SECT 3 WHITE</b>	0..255	Proportional WHITE From Off (lev. 0) to Full On (lev.255)
24	<b>SECT 3 WHITE FINE</b>	0..255	Proportional WHITE fine From Off (lev. 0) to Full On (lev.255)
25	<b>SECT 4 RED</b>	0..255	Proportional RED From Off (lev. 0) to Full On (lev.255)
26	<b>SECT 4 RED FINE</b>	0..255	Proportional RED fine From Off (lev. 0) to Full On (lev.255)
27	<b>SECT 4 GREEN</b>	0..255	Proportional GREEN From Off (lev. 0) to Full On (lev.255)
28	<b>SECT 4 GREEN FINE</b>	0..255	Proportional GREEN fine From Off (lev. 0) to Full On (lev.255)
29	<b>SECT 4 BLUE</b>	0..255	Proportional BLUE From Off (lev. 0) to Full On (lev.255)
30	<b>SECT 4 BLUE FINE</b>	0..255	Proportional BLUE fine From Off (lev. 0) to Full On (lev.255)
31	<b>SECT 4 WHITE</b>	0..255	Proportional WHITE From Off (lev. 0) to Full On (lev.255)
32	<b>SECT 4 WHITE FINE</b>	0..255	Proportional WHITE fine From Off (lev. 0) to Full On (lev.255)

## 9. "SECTORS RGBW+SHUT+DIM X4" mode (24 DMX channels)

- 1 SECTOR 1 RED
- 2 SECTOR 1 GREEN
- 3 SECTOR 1 BLUE
- 4 SECTOR 1 WHITE
- 5 SECTOR 1 SHUTTER
- 6 SECTOR 1 DIMMER
- 7 SECTOR 2 RED
- 8 SECTOR 2 GREEN
- 9 SECTOR 2 BLUE
- 10 SECTOR 2 WHITE
- 11 SECTOR 2 SHUTTER
- 12 SECTOR 2 DIMMER
- 13 SECTOR 3 RED
- 14 SECTOR 3 GREEN
- 15 SECTOR 3 BLUE
- 16 SECTOR 3 WHITE
- 17 SECTOR 3 SHUTTER
- 18 SECTOR 3 DIMMER
- 19 SECTOR 4 RED
- 20 SECTOR 4 GREEN
- 21 SECTOR 4 BLUE
- 22 SECTOR 4 WHITE
- 23 SECTOR 4 SHUTTER
- 24 SECTOR 4 DIMMER

Dmx Personality 9: SECTORS RGBW+SHUT+DIM x4 (24 channels)			
#	Name	Dmx Levels Ranges And Functions	
1	SECTOR 1 RED	0..255	Proportional RED From Off (lev. 0) to Full On (lev.255)
2	SECTOR 1 GREEN	0..255	Proportional GREEN From Off (lev. 0) to Full On (lev.255)
3	SECTOR 1 BLUE	0..255	Proportional BLUE From Off (lev. 0) to Full On (lev.255)
4	SECTOR 1 WHITE	0..255	Proportional WHITE From Off (lev. 0) to Full On (lev.255)
5	SECTOR 1 SHUTTER	0..9	Blackout
		10..19	Open
		20..29	Blackout
		30..119	Strobe (from 3,27 s to 30 ms)
		120..149	Pulse up (from 42,6 s to 120 ms)
		150..179	Pulse down (from 42,6 s to 120 ms)
		180..204	Random strobe
		205..229	Full independent random strobe
		230..255	Open
6	SECTOR 1 DIMMER	0..255	Proportional master dimmer From Off (lev. 0) to Full On (lev.255)

<b>Dmx Personality 9: SECTORS RGBW+SHUT+DIM x4 (24 channels)</b>			
<b>#</b>	<b>Name</b>	<b>Dmx Levels Ranges And Functions</b>	
7	<b>SECTOR 2 RED</b>	0..255	Proportional RED From Off (lev. 0) to Full On (lev.255)
8	<b>SECTOR 2 GREEN</b>	0..255	Proportional GREEN From Off (lev. 0) to Full On (lev.255)
9	<b>SECTOR 2 BLUE</b>	0..255	Proportional BLUE From Off (lev. 0) to Full On (lev.255)
10	<b>SECTOR 2 WHITE</b>	0..255	Proportional WHITE From Off (lev. 0) to Full On (lev.255)
11	<b>SECTOR 2 SHUTTER</b>	0..9	Blackout
		10..19	Open
		20..29	Blackout
		30..119	Strobe (from 3,27 s to 30 ms)
		120..149	Pulse up (from 42,6 s to 120 ms)
		150..179	Pulse down (from 42,6 s to 120 ms)
		180..204	Random strobe
		205..229	Full independent random strobe
230..255	Open		
12	<b>SECTOR 2 DIMMER</b>	0..255	Proportional master dimmer From Off (lev. 0) to Full On (lev.255)
13	<b>SECTOR 3 RED</b>	0..255	Proportional RED From Off (lev. 0) to Full On (lev.255)
14	<b>SECTOR 3 GREEN</b>	0..255	Proportional GREEN From Off (lev. 0) to Full On (lev.255)
15	<b>SECTOR 3 BLUE</b>	0..255	Proportional BLUE From Off (lev. 0) to Full On (lev.255)
16	<b>SECTOR 3 WHITE</b>	0..255	Proportional WHITE From Off (lev. 0) to Full On (lev.255)
17	<b>SECTOR 3 SHUTTER</b>	0..9	Blackout
		10..19	Open
		20..29	Blackout
		30..119	Strobe (from 3,27 s to 30 ms)
		120..149	Pulse up (from 42,6 s to 120 ms)
		150..179	Pulse down (from 42,6 s to 120 ms)
		180..204	Random strobe
		205..229	Full independent random strobe
230..255	Open		
18	<b>SECTOR 3 DIMMER</b>	0..255	Proportional master dimmer From Off (lev. 0) to Full On (lev.255)
19	<b>SECTOR 4 RED</b>	0..255	Proportional RED From Off (lev. 0) to Full On (lev.255)
20	<b>SECTOR 4 GREEN</b>	0..255	Proportional GREEN From Off (lev. 0) to Full On (lev.255)
21	<b>SECTOR 4 BLUE</b>	0..255	Proportional BLUE From Off (lev. 0) to Full On (lev.255)
22	<b>SECTOR 4 WHITE</b>	0..255	Proportional WHITE From Off (lev. 0) to Full On (lev.255)
23	<b>SECTOR 4 SHUTTER</b>	0..9	Blackout
		10..19	Open
		20..29	Blackout
		30..119	Strobe (from 3,27 s to 30 ms)
		120..149	Pulse up (from 42,6 s to 120 ms)
		150..179	Pulse down (from 42,6 s to 120 ms)
		180..204	Random strobe
		205..229	Full independent random strobe
230..255	Open		
24	<b>SECTOR 4 DIMMER</b>	0..255	Proportional master dimmer From Off (lev. 0) to Full On (lev.255)

**NOTES**

**NOTES**

## ISO 9001:2015

DTS quality system is  
certified to the ISO  
9001:2015 standard



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MADE IN  
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